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ABSTRACT

The Decoding Skills Test (DST) was developed to provide a detailed measurement of decoding skills which could be used in research on developmental dyslexia. Another purpose of the test is to provide a diagnostic-prescriptive instrument to be used in the evaluation of, and program planning for, children needing remedial reading. The test is criterion referenced, and consists of three subtests: Basal Word Recognition--11 lists of 10 words each (Subtest I): Phonic Decoding--lists of real/nonsense words (Subtest II): and Oral Passage Reading--11 passages corresponding to Subtest I (Subtest III). Although it does not emphasize comprehension ability, a "simple recall" comprehension supplement is included for detection of gross comprehension deficiencies. The manual explains test instructions, administration, and scoring procedures. Diagnostic scoring information and current uses of the DST for research and evaluation are also included: a copy of the DST is appended. (GK)

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DST

DECODING SKILLS TEST

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AND ARLENE ADLER

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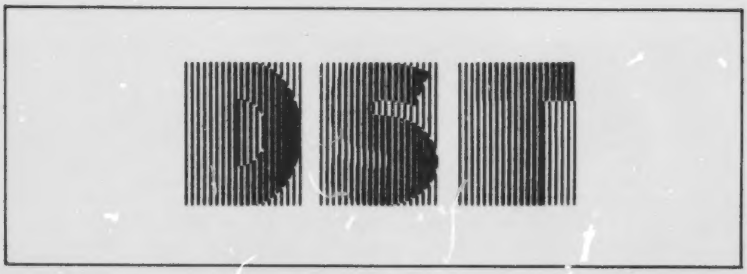

DECODING SKILLS TEST

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ERRATA

P. 7 In Table 1, the definition of "assumed correct" (Code 8) should read: "Assumed Correct items are *unadministered* items which are below the Basal Levels on Subtest I and III."

Table 1 is also reproduced as Appendix B (P. 60) where the same correction holds.

P. 56 In the paragraph headed *Research on Reading Problems*, the sentence which begins on line 14 and extends onto line 15 should read: "On this measure, the *mean score* of the Sixth Grade poor readers was still below that of the Second Grade good readers."

We would like to thank a number of persons for their contributions to the development of the Decoding Skills Test and to the writing of this manual: Brian Michel, Gabrielle Winsberg, and Carlyle Rock, our research assistants; Jeff Kochnower, Bert Winsberg, and our other collegues at the Institute; Susan Auman, our statistical analyst; Stephen Frankel, our editorial and design consultant; Richard Sakowsky, our computer programmer; Jon Baron of the University of Pennsylvania and Noel Dunivant of New York University, who served as special consultants in the areas of test development and data analysis; Adolph Christ, Director of the Division of Child and Adolescent Psychiatry at Downstate Medical Center; the Interdependent Learning Model, its Director, Harold Freeman, staff, and affiliated Follow Through projects in New York and Atlanta; the staff of the Learning Center and Developmental Evaluation Clinic at Kings County Hospital; Donald Kaplan, Director of Pupil Personnel of Brooklyn's School District 18; and the Principals, staffs, and children of New York City Public Schools 76, 114, 272, 276, and 279.

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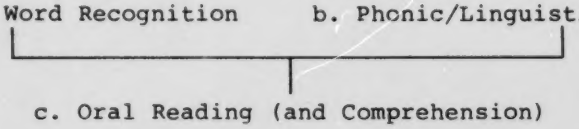
CHAPTER 1 INTRODUCTION AND TEST OVERVIEW

The Decoding Skills Test (DST) was developed by the Long Island Research Institute through a contract with the National Institute of Child Health and Human Development. The initial purpose in developing the DST was to provide a "detailed measurement of decoding skills which could be used in research on developmental dyslexia." Since the test does provide such detailed measurement of decoding skills, and thus, is diagnostic in nature, an obvious secondary purpose emerged during the course of its development: to provide a diagnostic-prescriptive instrument which could be used in the evaluation of, and program planning for, children in need of remedial help in reading.

The DST is "criterion-referenced" in that its contents have been derived from a wide variety of classroom materials currently in use in Grades One through Five. It consists of three subtests: Basal Word Recognition (Subtest I), Phonic Decoding (Subtest II), and Oral Passage Reading (Subtest III). The test was not intended to include a measure of comprehension ability, since the primary emphasis in research on reading disability is on the word recognition component of reading. However, as a function of its diagnostic-prescriptive role, a "simple recall" comprehension supplement has been added to the test, so that gross deficiencies in a child's ability to comprehend what is read might be detected. The Comprehension Supplement to the DST was not designed with the research objectives of the test in mind.

THE SKILLS MODEL

The DST is based on a simplified model of decoding in reading:



Primary emphasis is placed on word recognition in the model shown above. The model posits two ways in which a child may recognize a word (a and b) which are then combined in contextual reading (c). Although the two methods of word recognition are not mutually exclusive (i.e., a child does not necessarily apply only one method in decoding a particular word), for purposes of measurement, they are posed as two separate skill areas in the DST.

Basal Word Recognition (a). A child may be able to decode a word because it has been memorized. Certain words receive high exposure during classroom instruction and appear, with high frequency, in most basal reader programs. Although many such "basal vocabulary" words are phonetically "regular" (i.e., conform to the most common spelling-to-sound correspondence patterns in the language), many are "irregular" (i.e., do not conform to the most common patterns), and others are "regular" but contain complex spelling-to-sound correspondence patterns (such as diphthongs and other vowel digraphs).

Phonic/Linguistic Decoding (b). A child may be able to decode a word because he/she has learned the sounds that most commonly correspond to the particular letters (or letter groups) in the word. Most words in the language do conform to common spelling-to-sound correspondence patterns. Some of these patterns are simple (e.g., short vowel trigrams; long vowel, silent *e* ending words) and others are more complex (e.g., words containing vowel digraphs). A child will be able to apply knowledge of spelling-to-sound correspondence in decoding phonetically "regular" words, only to the degree that particular patterns have been mastered.

Oral Reading (c). Both methods of word recognition are combined in the act of oral reading, where they interact with a child's ability to use context clues and his/her overall fluency in reading.

THE DST SUBTESTS

Basal Word Recognition (Subtest I). The Basal Word Recognition Subtest consists of 11 lists, with 10 words in each list. The lists represent the Reader Levels covered during Grades One through Five (see page 30). The selection of the words at each Reader Level was based on an extensive survey of reading programs currently in use throughout the nation. The Harris-Jacobson Basic Elementary Reading Vocabularies (Harris & Jacobson, 1972) and the Botel Graded Vocabulary List (Botel, 1962) were used to check the content validity of the word lists that emerged from the survey. Modifications in Subtest I were based on research conducted with a preliminary version of the DST, and words that were found to be "out of order" on a particular list were shifted to other lists or eliminated.

Thus, a child's performance on Subtest I provides an estimate of his/her ability to recognize the vocabulary included in a typical basal reader program at each Reader Level.

Phonic Decoding (Subtest II). The Phonic Decoding Subtest is divided into two sections: Real Words and Nonsense Words. Each section consists of 12 lists, with 5 words in each list. In Section 1 (Real Words), the words in the first 6 lists are examples of six of the most common spelling-to-sound correspondence patterns occurring in monosyllabic words. These are:

1. Short vowel trigrams (e.g., "man").
2. Short vowel words containing consonant blends or consonant digraphs (e.g., "shot").
3. Long vowel, silent *e* ending words (e.g., "bake").
4. Long vowel, silent *e* ending words containing consonant blends or digraphs (e.g., "shake").
5. Words containing vowel digraphs (e.g., "boil").
6. Words containing vowel digraphs as well as consonant blends or consonant digraphs (e.g., "broil").

The last 6 lists in Section 1 contain polysyllabic words which are examples of the same patterns (e.g., "mitten," "finish," "mistake," "provide," "tower," and "trouser"). The nonsense words in Section 2 were constructed by changing the consonants (or consonant blends or digraphs) of the "real" words used in Section 1. Thus, the nonsense words represent the same spelling-to-sound correspondence patterns (in both monosyllabic and polysyllabic forms) as do the real words.

All of the words used in Section 1 of the Phonic Decoding Subtest were included in Harris & Jacobson's Elementary Vocabulary lists in Grades Two through Six. None of these words were found (in the author's survey) to be among the 15 most commonly taught basal vocabulary words in any of the Reader Levels covered in Grades One through Five. The first word in each of the 12 lists is found on

Harris & Jacobson's Second Grade Vocabulary list; the second word in each list is on the Third Grade Vocabulary list; the third word is on the Fourth Grade list; etc. Thus, the Instructional Levels of the words on the Phonic Decoding Subtest are above the Instructional Levels covered in the Basal Word Recognition Subtest. The Phonic Decoding Words are also somewhat less likely to have been included in all basal reading programs in use in Grades One through Five.

Thus, a child's performance on Subtest II provides an estimate of his/her ability to decode (real) words which contain the six spelling-to-sound correspondence patterns listed above, as well as his/her ability to transfer knowledge of these patterns to the decoding of unknown (nonsense) words.

Oral Passage Reading (Subtest III). The Oral Reading Subtest consists of eleven passages which correspond, in terms of Instructional Level, to the eleven lists in Subtest I. The passages are designed to represent sections from a basal reader at each of these levels, and the words presented *in isolation* in Subtests I and II are presented *in context* in Subtest III. Each passage contains the 10 words from the corresponding Subtest I list and 6 words selected from Subtest II (Real Words). These embedded words are referred to as Basal and Phonic "Target Words." All of the other words in each passage (except Passage #1) are included in Reader Levels that are (according to the Harris & Jacobson Elementary Vocabularies) at least one grade level below that of the Basal Target Words in the passage. Modifications in Subtest III were based on research conducted with a preliminary version of the DST, and non-target words that were found to be of equal or greater difficulty than the Target Words in a particular passage were eliminated.

The passages are scored for a variety of Passage Errors (see page 27), with special attention paid to the child's reading of the Target Words. A set of five "simple recall" comprehension questions follows each passage higher than Passage #1.

In addition to providing an estimate of the child's ability to recognize basal vocabulary words in the context of passages, Subtest III provides estimates of oral reading fluency, the use of phonics in contextual reading, and simple recall comprehension.

TEST MATERIALS

Subtest I Presentation Notebook. The items on the Basal Word Recognition Subtest are contained in the Subtest I notebook. Each word is reproduced on a separate page for the purpose of individual presentation. Each group of 10 words is separated by a divider page which is labeled with the list number of the items that follow it. The items on List #1 through List #6 follow consecutively from the front cover of the notebook. The items on List #7 through List #11 are printed on the reverse sides of the pages, and follow consecutively from the back cover of the notebook. During test administration, the notebook must be turned around after the child completes List #6, so that the items in the succeeding lists are facing the child.

Subtest II Presentation Notebook. The items on the Phonic Decoding Subtest are contained in the Subtest II notebook. Each word is reproduced on a separate page. Each group of 5 words is separated by a divider page which is labeled with the list number of the items that follow it. The items on the Real Word lists (RW-1 through RW-12) follow consecutively from the front cover of the notebook. The Nonsense Word items (NW-1 through NW-12) are printed on the reverse sides of the pages, and follow consecutively from the back cover of the notebook. After the child has completed the Real Word section of Subtest II, the notebook must be turned around so that the Nonsense Word items are facing the child.

Subtest III Presentation Notebook. The passages on the Oral Reading Subtest are contained in the Subtest III notebook. Each passage is reproduced on a separate page and follows consecutively from the front cover of the notebook. Passages are printed on both sides of most pages (e.g., Passage #3 is on the

reverse side of Passage #2). During test administration, only the passage which the child is reading should be exposed. Any other exposed passage should be covered with a blank sheet of paper.

Test Protocol. All of the items on the DST are reproduced on the Test Protocol. The column numbers ("Col. #s") which appear across from all Subtest I and Subtest II items, across from the items in the Subtest III Target Word lists, and on page 1 of the Protocol can be used to key punch the test for computer analysis. The page numbers referred to below are pages in the Test Protocol.

1. SUBTESTS I (pp.2-3) AND II (pp.3-4). The number of each item ("Item #") indicates its list number and its order within the list. For example, on Subtest I and both sections of Subtest II, Item #7-4 is the fourth item in the seventh list. On Subtest I, the item is "prove"; on Subtest II (Real Words), the item is "puppet"; and on Subtest II (Nonsense Words), the item is "duppet." The appropriate "Response Codes" (see Appendix B) are entered across from each item in the column labeled "Code" and incorrect responses are entered in the column labeled "Response."

2. SUBTEST III PASSAGES (pp.6-16). Each passage in Subtest III is reproduced on a separate page of the Test Protocol. The Basal Target Words in each passage are underlined once, and the Phonic Target Words are underlined twice. (Passage #1 does not include Phonic Target Words.) The lines of the passages are double spaced so that a record of the child's reading (see page 12) can be made in the area between the lines. The Basal and Phonic Target Words in each passage are also listed below the passage. The number of each item ("Item #") indicates its passage number, whether it is a Basal or Phonic Target Word, and its order of occurrence within the passage. For example, Item #3-B7 is the seventh Basal Target Word in Passage #3; Item #4-P2 is the second Phonic Target Word in Passage #4. The appropriate Response Codes (see Appendix H) for each Target Word are entered across from the item in the column labeled "Code."

3. SUBTEST III PASSAGE SCORES (bottom of each passage page). For each passage, the number of Passage Errors of each type (see page 27) is entered in the column labeled "# Errors (Code)" under "Passage Scores." The total number of Passage Errors and the time of passage reading (in minutes and seconds) are also entered.

4. DIAGNOSTIC SCORING INFORMATION (cover page of Protocol, unnumbered). The "Diagnostic Scoring Information" page was designed with the diagnostic-prescriptive objectives of the DST in mind. Chapter 6 provides instructions on how to enter this information, and Chapter 7 discusses its interpretation and application to remedial procedures.

5. SUMMARY TEST SCORES (p.1). This page may be used in keypunching the Test Protocol for computer analysis. The Summary Scores are primarily a transcription of the Diagnostic Scoring Information (see Appendix L).

Other necessary items. In addition to the three subtest notebooks and the Test Protocol, several other items are necessary for the administration of the DST:

1. This manual.

2. Stopwatch. The passages in Subtest III are timed.

3. Pencil. It is recommended that pencil be used for all Code column entries, as well as for the recording of passage reading (see Chapter 3).

4. Red pen. It is recommended that red pen be used to mark and to total all Passage Errors and to enter "Correct Response" totals on the Protocol (see Chapter 5).

ADMINISTRATION AND SCORING

Organization of Procedural Instructions. Chapters 3, 4, and 5 of this manual deal with all procedures necessary for the administration of the DST. The chapters are organized so that the reader will: first--Review methods for encoding responses while the test is being administered (Chapter 3); second--Review the proper order for administering test items (Chapter 4); and third--Review the procedures for scoring the test after administration has been completed (Chapter 5). The tables, figures, and other specific instructional material that are immediately necessary during test administration are presented in the text of the manual as well as in the Appendices. After the manual has been thoroughly read, the Tester can use the Appendices as an abbreviated guide during test administration.

Appendix C (Key to Phonetic Encoding) and Appendix D (Key to Pronunciation of Phonic Decoding Items) are not presented in the body of the text. It is recommended that the Tester review Appendix D prior to administering the test, so that he/she will be aware of possible ambiguities that may arise in the coding of certain responses. The method for phonetic encoding of responses presented in Appendix C is not intended as part of the instructions for scoring the test, but is presented merely to familiarize the Tester with the range of phonic sounds that occur in the language, the various letter configurations which signal these sounds, and possible methods for encoding them. The Tester may use this method, in whole or in part, or use another method entirely. The purpose of phonetic encoding is simply to have a written record of what the child says. Thus, any method of encoding which is logical and consistent will serve the purpose.

Scoring Objectives. The somewhat elaborate instructions for scoring the DST are a function of the test's role as a research tool. The variety of Response Codes (see Appendix B) for both correct and incorrect responses are designed to enable the researcher to study the specific characteristics of disabled readers (see Chapter 8). The procedures for determining item sequence within each subtest (see Appendices I, J, and K) are designed to make administration of each test item unnecessary when field studies involving large numbers of children are being conducted. However, since the DST is not a standardized instrument, and furthermore, since it is also intended as a diagnostic-prescriptive tool, persons using the DST may feel free to make modifications in the test's procedures. For example:

1. ALTERATION OF RESPONSE CODES. If the test is to be used for diagnostic-prescriptive purposes, the full range of Response Codes may not be relevant. Responses may simply be marked as correct or incorrect. It is also not necessary to enter Response Codes for unadministered items (i.e. items below the Basal Level or above the Ceiling Level).

2. ALTERATION OF ITEM SEQUENCE. The item "sampling" technique used in Subtest I (see Appendix I) is intended as a time-saving device and may be ignored. The Tester may administer each item consecutively beginning on List #1, or skip the lower-level lists entirely, depending on his/her knowledge of the child's reading level. The point at which the Tester ceases to administer items in a particular subtest may also be altered, particularly if the Tester knows that the child's reading ability is scattered across many levels.

3. DELETION OF SUMMARY TEST SCORES. The entry of Summary Test Scores on page 1 of the Protocol (see Chapter 8) is unnecessary if the test is to be used purely for diagnostic purposes.

4. DELETION OF DIAGNOSTIC SCORING INFORMATION. The entry of Diagnostic Scoring Information on the cover sheet of the Protocol (see Chapter 6) is unnecessary if the test is to be used purely for research purposes.

5. DELETION OF THE COMPREHENSION SUPPLEMENT. The Comprehension Supplement may be deleted if the test is to be used purely for research purposes, or if the Supplement is deemed to be of no diagnostic value.

CHAPTER 2 VERBAL INSTRUCTIONS TO CHILD

(Also Appendix A)

SUBTEST I

The Subtest I notebook is placed in front of the child so that the divider page is covering the first item in List #1. The Tester says:

I am going to show you some words that I want you to read. As soon as I turn the page, tell me what the word is. Some of the words may be hard and you may not know them. Just do the best you can. It is okay to guess.

If a prompt is required (see page 8), the Tester says:

What do you think it is? Do you want to make a guess?

SUBTEST II: REAL WORD SECTION

The Subtest II notebook is placed in front of the child so that the divider page is covering the first item in the Real Word section. The Tester says:

Now I am going to show you some words that you may be able to read by paying attention to the sounds of the letters in the words. Some of the words you may not know right away. When you see a word you don't know, try sounding it out. Don't worry if you don't know a word. Try it anyway.

If a prompt is required, the Tester says:

Try sounding it out.

SUBTEST II: NONSENSE WORD SECTION

The Subtest II notebook should be turned around and placed in front of the child so that the divider page is covering the first item in the Nonsense Word section. The Tester says:

Now I am going to show you some "funny-looking" words. They look like real words and they sound like real words, but they are not real words because they don't mean anything. They are nonsense words. But you can read them by sounding them out as if they <u>were</u> real words. Here is the first one. See if you can say it.

If the child starts off by giving a real word that looks something like the nonsense word, the Tester says:

That's a <u>real</u> word that looks (or sounds) something like this. But this is a <u>nonsense</u> word. Look at it carefully. Can you tell me what the <u>nonsense</u> word is?

If a prompt is necessary, the Tester says:

Try sounding it out.

SUBTEST III

The Tester finds the starting passage and places it in front of the child with a blank piece of paper covering any other exposed passage. If the starting passage is above Passage #1, the Tester says:

Now I am going to show you some little stories that I want you to read out loud. Read them as carefully as you can and don't rush. After you finish each story, I will ask you a few questions about it, so pay attention.

If the starting passage is Passage #1, the Tester deletes reference to the comprehension questions. If the child is then to go on to Passage #2, the Tester says:

From now on, after you finish a story, I will ask you some questions about the story, so pay attention.

It is permissable to prompt on the Target Words only. If a prompt is necessary on a Basal Target Word, the Tester says:

Do you want to try it? or *See if you can guess it.*

If a prompt is necessary on a Phonic Target Word, the Tester says:

Try sounding it out.

CHAPTER 3 SCORING PROCEDURES (1) DURING TEST ADMINISTRATION

GENERAL CODING INSTRUCTIONS

Table 1 shows all of the possible Response Codes for Subtest I and Subtest II items, as well as for Subtest III Target Words. These codes are entered in the Code column of the Test Protocol. Some codes *must* be entered during test administration. These include all "correct" Response Codes (Codes 1, 2, and 3), as well as the "incorrect--No Response" Code (Code 4). Codes for incorrect responses which the child has actually given (Codes 5, 6, and 7) may also be entered during test administration. However, it is often difficult to quickly make the distinctions which are necessary in order to classify incorrect responses into these codes. Therefore, the Tester should enter an approximation of the child's actual response (see Appendix C) in the Response column next to the item in the Test Protocol. (On Subtest III, incorrect Target Word responses are written above the Target Words on the Test Protocol passage.) The Tester will then enter the appropriate codes for these responses after test administration has been completed. Codes 8 ("assumed correct") and 9 ("assumed incorrect") are always entered after test administration has been completed.

Table 1 (Also Appendix B)

Response Codes

Definition		Code
Correct:	Immediate response (in 2 seconds or less).	1
Correct:	Response with some difficulty (in more than 2 seconds but less than 5) For example: a slight hesitation, a "stumbling" response, an immediate self-correction.	2
Correct:	Response with extreme difficulty (in more than 5 seconds).	3*
Incorrect:	No response. For example: Child says, "I don't know."	4
Incorrect:	Response contains vowel error--one or more vowel sounds incorrect, but consonant sounds correct.	5
Incorrect:	Response contains consonant error--one or more consonant sounds incorrect, but vowel sounds correct.	6
Incorrect:	Response contains errors on both vowels and consonants.	7
Correct:	Response is "assumed" correct. Assumed correct items are those below the Basal Levels on Subtests I and III.	8**
Incorrect:	Response is "assumed" incorrect. Assumed incorrect items are those above the Ceiling Levels on Subtests I, II, and III.	9

*Code 3 is not used in Subtest III, since the correct Target Word response would be provided by the Tester if the child did not give it within 5 seconds.

**Code 8 is not used on Subtest II since there is no Basal Level on this subtest.

8

SUBTEST I

The order of item administration for Subtest I is discussed in Chapter 4 and shown in Appendix I.

Coding Responses. Each item is scored immediately after the child makes a response. Correct Response Codes (Codes 1, 2, and) are entered directly in the Code column of the Test Protocol. Code 4 is entered if the child does not attempt a response. It is permissible to prompt if the child makes no response within five seconds. Incorrect responses are entered in the Response column of the Test Protocol unless the appropriate code (Code 5, 6, or 7) is entered immediately in the Code column.

Establishing Subtest I Basal Level. The Subtest I Basal Level is determined immediately after completion of Subtest I. There are two reasons for this: (1) so that the Tester can be sure that a Basal Level has been established, and (2) so that the Tester will know where to begin Subtest III. The Subtest I Basal Level is established as follows:

The Tester locates the lowest list on which the child scored less than 8 items correct. The list *just prior* to this is the Basal Level list (see Sample Protocols #2, page 15, and #3, page 16). The Tester labels this list with a (B). There are two situations in which there is no Basal Level on Subtest I. These are:

1. If the child scored less than 8 correct on List #1. The Tester writes (-B) at the top of List #1. (See Sample Protocol #5, page 18.)

2. If the child scored 8 or more correct (including assumed correct) on all lists. The Tester writes (B+) at the top of List #11. (See Sample Protocol #4, page 17.)

SUBTEST II

The order of item administration for Subtest II is discussed in Chapter 4 and shown in Appendix J.

Subtest II is divided into two sections: Real Words and Nonsense Words. The Response Codes for this subtest are the same as those for Subtest I (see Appendix B). As in Subtest I, the Tester should write the incorrect responses in the Response column of the Test Protocol unless the appropriate codes can be filled in immediately. This is particularly important in the Nonsense Word section of Subtest II, since correct responses may be difficult to determine. Appendix C provides a key for encoding the most common vowel and consonant sounds in the language, and Appendix D provides the acceptable pronunciations of all of the items on Subtest II. It will be noted that a number of Subtest II items (both real and nonsense words) have more than one acceptable pronunciation.

SUBTEST III

Subtest III consists of passages each of which contains 10 words from Subtest I, called Basal Target Words, and 6 words from Subtest II, called Phonic Target Words. In the Test Protocol version of each passage, each Basal Target Word is underlined once, and each Phonic Target Word is underlined twice. The passage numbers on Subtest III correspond to the list numbers on Subtest I.

The order of passage administration on Subtest III is discussed in Chapter 4 and shown in Appendix K.

Scoring of Passage Errors. Each passage is scored in terms of "Passage Errors" and is timed in minutes and seconds. This means that, while the child is reading, the Tester makes a written record (on the Test Protocol) of the child's reading. Table 2 shows the types of errors that are recorded and the methods used for recording them. These errors are recorded for all words (including Target Words) in each passage. Following Table 2 are some important points related to the scoring of Passage Errors.

Table 2 (also Appendix E)

Passage Errors

Error Type	Definition	While testing record (in pencil):	After testing label (in red):
Error Substitution	Child gives a nonsense word in place of a word in the passage (see Point # 1).	Chief Black glared at the young reporter.	ES
Word Omission	Child omits word, or word is provided by tester after pause (see Point #3)	"But he's got to go!" said Farmer Gray.	O
Meaningful Substitution	Child gives another real word in place of a word in the passage (provided that the word is not a Transformation). (see Point # 1)	Suddenly she heard a sound ~~sneeze~~ come from the barn.	MS
Transformation	Child gives a version of a word in the passage which usually contains the same basic "root" word. Includes tense changes, addition or deletion of "s" or "ed" or other suffix, creation or separation of a contraction.	She and Red drove to the shop in town... Linda was not brave...	T
Word Addition	Child inserts word into the passage.	...and the two boys looked in...	WA
Inversion	Child changes the order of words in the passage.	You will find what you are looking...	I
Repetition	Child repeats a word. A group of words repeated (as a group) counts as one Repetition error.	Yes it is fun to run up and... Yes it is fun to run up and..	R
Hesitation/ Self-Correction	Child stumbles on a word, or pauses for more than 2 seconds, or immediately corrects an incorrect response.	Mary MS shut the box and hit it...	HS
Redirection	Child omits a group of words (at least 3) or a line. Tester should stop child and reorient him so that the omitted words can be attempted. If the child then makes other errors, these should be recorded and counted as well. (see point # 2)	She did not make one mistake. [When she finished,] I asked her to sit beside me.	RED
Punctuation	Child clearly ignores a punctuation mark, or inserts one where none exists (see Point # 4).	...Sam broke into a store. He tore his trousers... Sam would trudge from one place...	P

Points Related to the Scoring of Passage Errors. (Also Appendix F.)

1. If the child gives a nonsense word in place of a word in the passage and the word *is not underlined* (i.e., not a Target Word), the Tester may simply cross out the word on the Test Protocol and write "ES" above it. If the child gives an incorrect "real" word in place of a non-target word in the passage, the Tester may cross the word out and write "MS" above it. However, if the incorrect response (either real or nonsense word) is given for a *Target Word* (i.e., underlined once or twice), the Tester must write the response the child has given above the word in the Test Protocol passage.

2. If more than one Passage Error occurs on the same word, this counts as only one Passage Error. For example:

Child says:	*Passage Error:*
". . . as the ~~announcer~~ did this gave a perfect description . . ." *(two words inserted for one word in passage)*	1 MS
"If only I could leave the continent MS . . ." *(hesitation and repetition on same word)*	1 MS *or* 1 R
". . . no doubt at all that one day he would be caught . . ." *(two words inserted between two passage words)*	1 WA
". . . no matter how cautious he might be." *(more than one repetition of same word)*	1 R

However, if a Redirection occurs, count the Redirection, as well as any other errors that occur after the child has been reoriented. For example:

Child says:	*Passage Error:*
["When she ~~finished~~ finished] I asked her to sit beside me."	1 RED and 1 ES

(Redirection back to "When she finished" *and the word* "finished" *is read incorrectly)*

3. More time is given for the child to respond to Target Words than to non-target words in the passage. If the child hesitates for at least two seconds on a Target Word, the Tester should probe for a response (e.g., "Do you know the word?") before telling the child the word. If the child pauses on a non-target word for at least two seconds, the Tester should tell the child the word (circle and count as Word Omission). Of course, if the child skips over any word entirely, this is automatically a Word Omission Error.

4. Punctuation Errors are determined as follows:

   A deleted punctuation mark occurs if the child fails to pause *and also* fails to indicate, through oral inflection, the presence of a punctuation mark.

   An inserted punctuation mark occurs if the child pauses where there is no mark *and also* indicates, through oral inflection, the presence of a punctuation mark.

   Uninflected question marks are not counted as Punctuation Errors, nor are deleted commas, unless they change the meaning of the passage in an obvious way.

5. The time of each passage reading is recorded, in minutes and seconds, in the space provided below "Passage Error Scores" on the Test Protocol.

Comprehension Supplement. If the Comprehension Supplement is to be administered, the Tester should ask the questions immediately after the child has completed reading the passage and the Tester has entered the time on the Test Protocol. The questions for each passage are listed on pp. 17-18 of the Test Protocol, and Appendix G provides a key to the correct answers. If the child gives an obviously correct answer, the Tester may enter a check mark (✓) in the space provided for Response. If the answer is obviously incorrect, the Tester may enter an X in the space. If the Tester is not certain whether the child's response is correct or incorrect, an approximation of the answer should be written in the space.

Coding Responses to Basal Target Words. After each passage has been read and Passage Errors have been recorded (and comprehension questions asked), the Response Codes for each Basal Target Word in the passage should be entered in the Code column of the Basal Target Word list that is below each passage in the Test Protocol. Only underlined Basal Target Words are considered in determining Response Codes (Target Words are sometimes repeated later in the passage). The Response Codes for the Subtest III Target Words are the same as those for the Subtest I and II items, except that Code #3 is not used (see Appendix B).

Table 3 shows how the appropriate Response Codes for the Basal Target Words can be determined based on the record of the child's passage reading.

Table 3 (Also Appendix H)

Response Codes for Target Words

If the Passage Record Shows:	The Passage Error Is:	The Response Code Is:
No marks above or around word	no error	1
An HS written above word	HS*	2
A repetition mark (_____) below word	R*	2
A transformation (e.g. arrived)	T*	1 or 2
An inversion (∿)	I*	1 or 2
The word circled	O**	4
The word crossed out and a nonsense word written above it	ES**	5, 6, or 7
The word crossed out and another real word written above it	HS**	5, 6, or 7

* Passage Errors not counted as Target Word errors

**Passage Errors counted as Target Word errors

Sample Protocol. Sample Protocol #1 shows Passage #5 scored for Passage Errors with the Response Codes for the Basal Target Words entered in the Code column. The time of passage reading (1 minute, 10 seconds) is entered in the appropriate spaces below "Passage Scores."

Page 10

SAMPLE PROTOCOL # 1

Passage # 5

(1) Farmer Gray called Farmer ~~John~~ Jones to complain NS about the rooster he
(2) got from Farmer John.
(3) "I knew that bird was ~~strong~~ strong/mean," says said Farmer Gray over the telephone,
(4) but then he eats and eats. In a short NS space of time, almost all the food
(5) in the house is gone!"
(6) "But that's a ~~poor~~ spare rooster," said Farmer NS John.
(7) "But he's got to go!" said Farmer Gray. "I don't didn't know what else
(8) to do!" He was angry now.
(9) "Where is the ~~bird~~ rooster now?" asked Farmer John.
(10) "He's up in the barn tower eating a banana and flower. He eats
(11) flowers too," said Farmer NS Gray
(12) "I'll come and get him as soon as I am able to," said Farmer John.
(13) "Thank you. I'm ~~grateful~~ grateful," said Farmer Gray.

Card 08 (continued)

Item #	Word	Code	Col.#	Item #	Word	Code	Col.#
	Basal Target Words						
	(blank column)	—	64				
5-B1	knew	1	65	5-B6	star	2	70
5-B2	strong	3	66	5-B7	else	1	71
5-B3	short	1	67	5-B8	angry	1	72
5-B4	space	a	68	5-B9	banana	2	73
5-B5	almost	1	69	5-B10	able	1	74
	Phonic Target Words						
5-P1	complain	—	75				
5-P2	rooster	—	76				
5-P3	telephone	—	77				
5-P4	tower	—	78				
5-P5	flower	—	79				
5-P6	grateful	—	80				

(go to p. 11)

Card 10 (continued)

PASSAGE SCORES

Error Type	Marking Symbols	# Errors (Code)	Col. #s	Error Type	Marking Symbols	# Errors (Code)	Col. #s
Error Substitution	dog ES		43-44	Inversion	I am I		59-60
Word Omission	dog O		45-46	Repetition	dog R		61-62
Meaningful Substitution	cat dog MS		47-48	Hesitation/ Self-Correction	NS dog HS		63-64
Transformation	has T		49-50	Redirection	[ ] RED		65-66
Word Addition	WA		51-52	Punctuation	P		67-68
	(blank column)		53				69-70
Passage Time — minutes	1		54-55	Total # Passage Errors			71-80
Passage Time — seconds	10		56-57		(blank columns)		
	(blank column)		58				

(go to p. 11)

The child in Sample Protocol #1 made the following Passage Errors:

In Line:	Word(s) in Passage:	Child's Response:	Error Type:
1	called	"calls"	Transformation (T)
	John	"Jones"	Meaningful Substitution (MS)
	complain	"com-complain"	Hesitation or Self Correction (HS)
3	strong	"stringy"	MS
	said	"says"	T
	...over the...	"...over the over the..."	Repetition (R)
4	...but he eats...	"...but then he eats..."	Word Addition (WA)
	...and eats. In a...	"...and eats in a..."	Punctuation (P)
	space	"spot-space"	HS
6	star	"spŏtĕ"	Error Substitution (ES)
	John	"Jŏn-John"	HS
7	don't	"didn't"	T
9	bird	"rooster"	MS
	asked	"asks"	T
10	banana	"banana banana"	R
	...and a flower.	"...and flowers."	Word Omission (O) and T
11	...said Farmer Gray.	"...said the Farmer."	WA and O
13	grateful	"gātful"	ES

The Code columns in the Basal Target Word list below the passage show the Response Codes for the Basal Target Words. The Tester might have simply written MS or ES above the substitution errors in the passage when they occurred on non-target words (e.g., "John" in line 1; "bird" in line 9). However, it was necessary to enter the child's actual response above the Target Words (e.g., "strong," "star," and "grateful") so that the Response Codes could be determined. (The entering of Response Codes for the Phonic Target Words as well as the "Passage Error Scores" will be covered in Chapter 5.)

CHAPTER 4 TEST ADMINISTRATION SEQUENCE

SUBTEST I

Item Sequence Diagram. Figure 1 shows the sequence for the administration of items in Subtest I. The Tester begins on List #1 (as shown in the figure) and tests the first 3 items. The unbroken lines show the most likely sequences. The broken lines refer to situations in which the child's reading ability is below the level of the test (i.e., errors on List #1) or above the test's ceiling (i.e., no errors on List #11).

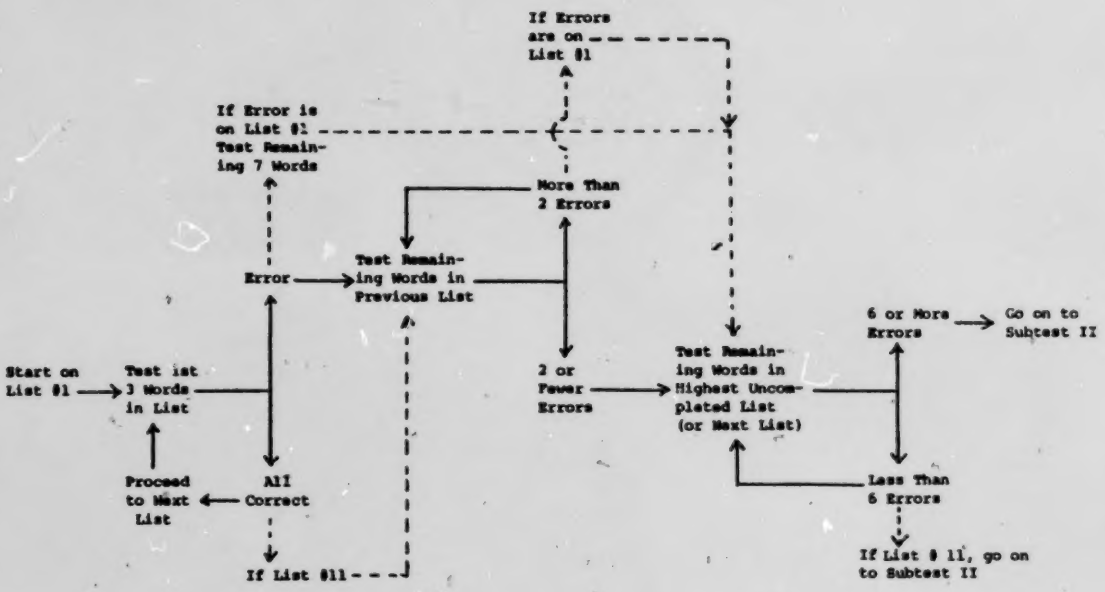

If Errors are on List #1
If Error is on List #1 Test Remaining 7 Words
More Than 2 Errors
Error
Test Remaining Words in Previous List
6 or More Errors
Go on to Subtest II
Start on List #1
Test 1st 3 Words in List
2 or Fewer Errors
Test Remaining Words in Highest Uncompleted List (or Next List)
Proceed to Next List
All Correct
Less Than 6 Errors
If List #11
If List # 11, go on to Subtest II

Figure 1 (Also Appendix I). Sequence of item administration in Subtest I.

Sample Protocols. Sample Protocol #2 illustrates a possible sequence of items based on the directions in Figure 1. The child was given the first three items in List #1, #2, #3, and #4 (Items 1-1 through 1-3; 2-1 through 2-3; 3-1 through 3-3; and 4-1 through 4-3). The child was correct on each item until he missed the word "fine" (Item 4-2). The Tester then asked the child to read the remaining items in List #3 (Items 3-4 through 3-10) and the child made two errors (Items 3-4 and 3-7) but he did *not* make *more than* two errors. Therefore, the Tester asked the child to read the remaining items in List #4 (Items 4-4 through 4-10) and continued to administer all of the items in each succeeding list until the child reached a list on which he made *more than* five errors. In this Protocol, the child made more than five errors (he made seven errors) on List #6. The Tester stopped administering Subtest I items at this point. The Subtest I Basal Level on this Protocol is List #4.

SAMPLE PROTOCOL # 2

BASAL WORD RECOGNITION (SUBTEST I)

KEYPUNCH:	Code	Col. #
(Card number)	0 2	1-2
(blank column)	—	3
(ID #)_____		4-12

Item #	Word	Response	Code	Col. #
		(blank column)	----	13
1- 1	to		1	14
1- 2	yes		1	15
1- 3	the		1	16
1- 4	up		—	17
1- 5	a		—	18
1- 6	in		—	19
1- 7	at		—	20
1- 8	it		—	21
1- 9	is		—	22
1-10	I		—	23
		(blank colum)	----	24
2- 1	so		1	25
2- 2	was		1	26
2- 3	went		2	27
2- 4	let		—	28
2- 5	box		—	29
2- 6	she		—	30
2- 7	no		—	31
2- 8	am		—	32
2- 9	help		—	33
2-10	jump		—	34
		(blank column)	----	35
3- 1	sing		2	36
3- 3	when		1	37
3- 3	next		1	38
3- 4	thing	thin	6	39
3- 5	I'll		1	40
3- 6	now		1	41
3- 7	other	another	7	42
3- 8	best		1	43
3- 9	new		1	44
3-10	long		1	45
		(blank column)	----	46
4- 1	shop		1	47
4- 2	fine	fin	5	48
4- 3	end		1	49
4- 4	part	pär	4	50
4- 5	dear		1	51
4- 6	dry		1	52
4- 7	wood		1	53
4- 8	better		2	54
4- 9	begin		2	55
4-10	start		1	56

Item #	Word	Response	Code	Col. #
		(blank column)	----	57
5- 1	strong		1	58
5- 2	able	abelz	5	59
5- 3	almost		2	60
5- 4	angry	egrz	7	61
5- 5	star		1	62
5- 6	space		1	63
5- 7	else	elzs	5	64
5- 8	knew		2	65
5- 9	short	shet	7	66
5-10	banana		1	67
		(blank colum)	----	68
6- 1	famous	famel	7	69
6- 2	daughter	dercity	7	70
6- 3	crowd	crend	7	71
6- 4	indeed		2	72
6- 5	field	fend	6	73
6- 6	finally	finest	7	74
6- 7	sneeze		1	75
6- 8	earn	ern	7	76
6- 9	problem		2	77
6-10	worry	—	4	78
		(blank columns)	----	79-80
		(card number) 0 3		1-2
		(blank column)	—	3
		(ID #)_____		4-12
		(blank column)	----	13
7- 1	natural		—	14
7- 2	mutter		—	15
7- 3	coin		—	16
7- 4	prove		—	17
7- 5	bounce		—	18
7- 6	pleasant		—	19
7- 7	arrive		—	20
7- 8	shelter		—	21
7- 9	square		—	22
7-10	protect		—	23

(go to p.3)

Sample Protocol #3 illustrates another possible sequence of items in Subtest I. The child was given the first 3 items in Lists #1, #2, #3, #4, #5, and #6. The first 3 items in Lists #1 through #5 were correct , but at List #6 the child made 2 errors (Items 6-1 and 6-2) in the first 3 words. Therefore, the Tester asked the child to read the remaining items in List #5 (Items 5-4 through 5-10) and the child got *more than* 2 of these items wrong (Items 5-4, 5-6, and 5-9). The Tester then asked the child to read the remaining items in List #4 (Items 4-4 through 4-10) and the child made less than 3 errors (he made 1 error on Item 4-10). The next item administered (after 4-10) was 6-4, since all items between 4-10 and 6-4 had already been administered. The Tester continued to administer items until the child made *more than* 5 errors (he made 6 errors) on List #7. The Subtest I Basal Level on this Protocol is List #4.

SAMPLE PROTOCOL # 3

Page 2

BASAL WORD RECOGNITION (SUBTEST I)

KEYPUNCH:	Code	Col. #
(Card number)	0 2	1-2
(blank column)		3
(ID #)_____		4-12

Item #	Word	Response	Code	Col. #
		(blank column)	----	13
1- 1	to		1	14
1- 2	yes		1	15
1- 3	the		1	16
1- 4	up			17
1- 5	a			18
1- 6	in			19
1- 7	at			20
1- 8	it			21
1- 9	is			22
1-10	I			23
		(blank column)	----	24
2- 1	so		1	25
2- 2	was		1	26
2- 3	want		1	27
2- 4	let			28
2- 5	box			29
2- 6	she			30
2- 7	no			31
2- 8	am			32
2- 9	help			33
2-10	jump			34
		(blank column)	----	35
3- 1	sing		1	36
3- 3	when		1	37
3- 3	next		1	38
3- 4	thing			39
3- 5	I'll			40
3- 6	now			41
3- 7	other			42
3- 8	best			43
3- 9	new			44
3-10	long			45
		(blank column)	----	46 (B)
4- 1	shop		1	47
4- 2	fine		1	48
4- 3	end		1	49
4- 4	part		1	50
4- 5	dear		1	51
4- 6	dry		1	52
4- 7	wood		1	53
4- 8	better		1	54
4- 9	begin		1	55
4-10	start	start	6	56

Item #	Word	Response	Code	Col. #
		(blank column)	----	57
5- 1	strong		1	58
5- 2	able		2	59
5- 3	almost		1	60
5- 4	angry	agerer	7	61
5- 5	star		1	62
5- 6	space	splak	7	63
5- 7	else		2	64
5- 8	knew		1	65
5- 9	short		4	66
5-10	banana		1	67
		(blank column)	----	68
6- 1	famous	farmer	7	69
6- 2	daughter	digter	7	70
6- 3	crowd		1	71
6- 4	indeed		1	72
6- 5	field		1	73
6- 6	finally	frnil	6	74
6- 7	sneeze		1	75
6- 8	earn	er	7	76
6- 9	problem	prosper	7	77
6-10	worry		1	78
		(blank column)	----	79-80
		(card number) 0 3		1-2
		(blank column)	----	3
		(ID #)_____		4-12
		(blank column)	----	13
7- 1	natural	Naste	7	14
7- 2	mutter	mather	7	15
7- 3	coin		1	16
7- 4	prove	prav	5	17
7- 5	bounce		1	18
7- 6	pleasant	piester	7	19
7- 7	arrive		2	20
7- 8	shelter	shelly	7	21
7- 9	square		1	22
7-10	protect	project	6	23

(go to p.3)

The child in Sample Protocol #4 has been given the first 3 items on all lists up through List #11 (Lists #1 through #7 are not shown). He has made no errors on any of the first 3 items on any list. The Tester still asks this child to read the remaining items in Lists #10 and #11. If this child had made more than 2 errors on List #10, the Tester would have asked him to read the remaining items on List #9 as well. The Subtest I Basal Level on this Protocol is above list #11 ((B+)).

SAMPLE PROTOCOL # 4

Page 3

Page 3

BASAL WORD RECOGNITION (SUBTEST I)

Item #	Word	Response	Code	Col. #	Item #	Word	Response	Code	Col. #
	(blank column)		----	24		*(blank column)*		----	46
8- 1	stalk		1	25	10- 1	frequent		3	47
8- 2	project		1	26	10- 2	purchase		1	48
8- 3	stern		2	27	10- 3	advertize		1	49
8- 4	shallow			28	10- 4	quality		1	50
8- 5	pace			29	10- 5	terrify		1	51
8- 6	area			30	10- 6	vast		1	52
8- 7	custom			31	10- 7	emergency		1	53
8- 8	bush			32	10- 8	ridge		1	54
8- 9	detective			33	10- 9	reckon	rEKan	5	55
8-10	design			34	10-10	confident		2	56
	(blank column)		----	35		*(blank column)*		----	57 (B+)
9- 1	instruction		1	36	11- 1	continent		1	58
9- 2	contact		1	37	11- 2	trudge		2	59
9- 3	glare		2	38	11- 3	desperate		1	60
9- 4	furnish			39	11- 4	awkward	awEKerd	7	61
9- 5	justice			40	11- 5	distress		1	62
9- 6	extend			41	11- 6	cautious		1	63
9- 7	resolve			42	11- 7	doubt		1	64
9- 8	stride			43	11- 8	solemn	sOlcm	5	65
9- 9	dignity			44	11- 9	prairie		1	66
9-10	abandon			45	11-10	swollen		1	67

(go to p. 4)

Sample Protocol #5 illustrates an item sequence that may occur if a child is a non-reader or can read only a few words. The Tester began by administering the first 3 items in List #1 and the child missed 1 of these items. Therefore, the Tester administered the remaining items in List #1. The Tester continued to administer items until the child missed more than 5 items in a particular list--in this case, the child missed 6 items in List #2. On this Protocol, the Basal Level is below List #1 (-B).

SAMPLE PROTOCOL # 5 Page 2

BASAL WORD RECOGNITION (SUBTEST I)

KEYPUNCH:	Code	Col. #
(Card number)	0 1	1-2
(blank column)	—	3
(ID #)_ _ _ _ _ _ _ _ _		4-12

Item #	Word	Response	Code	Col. #
-B		(blank column)	----	13
1- 1	to		1	14
1- 2	yes	—	4	15
1- 3	the		2	16
1- 4	up	put	7	17
1- 5	a		1	18
1- 6	in	on	5	19
1- 7	at		1	20
1- 8	it		1	21
1- 9	is	it's	6	22
1-10	I		1	23
		(blank column)	----	24
2- 1	so		3	25
2- 2	was	we	7	26
2- 3	went	what	7	27
2- 4	let		2	28
2- 5	box		1	29
2- 6	she	her	7	30
2- 7	no	to	7	31
2- 8	am		1	32
2- 9	help	—	4	33
2-10	jump	—	4	34
		(blank column)	----	35
3- 1	sing			36
3- 3	when			37
3- 3	next			38
3- 4	thing			39
3- 5	I'll			40
3- 6	now			41
3- 7	other			42
3- 8	best			43
3- 9	new			44
3-10	long			45
		(blank column)	----	46
4- 1	shop			47
4- 2	fine			48
4- 3	end			49
4- 4	part			50
4- 5	dear			51
4- 6	dry			52
4- 7	wood			53
4- 8	better			54
4- 9	begin			55
4-10	start			56

Item #	Word	Response	Code	Col. #
		(blank column)	----	57
5- 1	strong			58
5- 2	able			59
5- 3	almost			60
5- 4	angry			61
5- 5	star			62
5- 6	space			63
5- 7	else			64
5- 8	knew			65
5- 9	short			66
5-10	banana			67
		(blank column)	----	68
6- 1	famous			69
6- 2	daughter			70
6- 3	crowd			71
6- 4	indeed			72
6- 5	field			73
6- 6	finally			74
6- 7	sneeze			75
6- 8	earn			76
6- 9	problem			77
6-10	worry			78
		(blank columns)	----	79-80
		(card number) 0 2		1-2
		(blank column)	----	3
		(ID #)_ _ _ _ _ _ _ _ _		4-12
		(blank column)	----	13
7- 1	natural			14
7- 2	mutter			15
7- 3	coin			16
7- 4	prove			17
7- 5	bounce			18
7- 6	pleasant			19
7- 7	arrive			20
7- 8	shelter			21
7- 9	square			22
7-10	protect			23

(go to p.3)

SUBTEST II

Item Sequence Diagram. Figure 2 shows the sequence for the administration of items in Subtest II. The Tester begins with Item 1-1 ("hit") in the Real Word section of the subtest, and continues testing until the child either makes 10 consecutive errors (on any combination of lists) or until he completes all of the Real Word items. The Tester then administers the Nonsense Word section of the subtest in the same fashion, beginning with Item 1-1 ("jit") and continuing until the child makes 10 consecutive errors or completes the subtest.

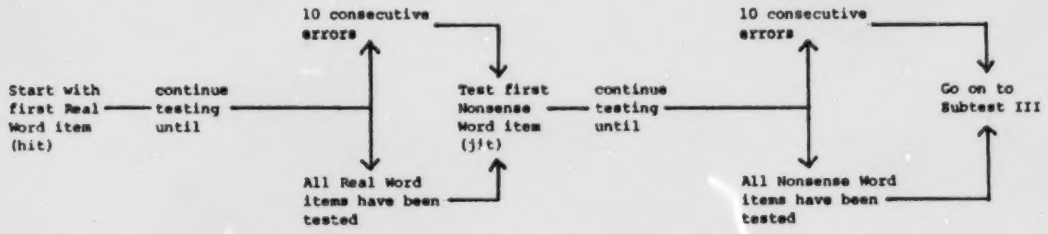

Start with first Real Word item (hit)
continue testing until
10 consecutive errors
All Real Word items have been tested
Test first Nonsense Word item (jit)
continue testing until
10 consecutive errors
All Nonsense Word items have been tested
Go on to Subtest III

Figure 2 (Also Appendix J). Sequence of item administration in Subtest II.

Sample Protocol. Sample Protocol #6 illustrates a possible sequence of items in Subtest II (Real Words). The Tester began by administering the first item in the Real Word section and continued testing until the child made 10 consecutive errors (on Items 8-3 through 10-2). The Nonsense Word section (not shown) would now be administered, beginning with the first item (Item 1-1: "jit") and continuing until the child either completed the subtest or made 10 consecutive errors.

SAMPLE PROTOCOL # 6 — Page 4

PHONIC DECODING-REAL WORDS (SUBTEST II)

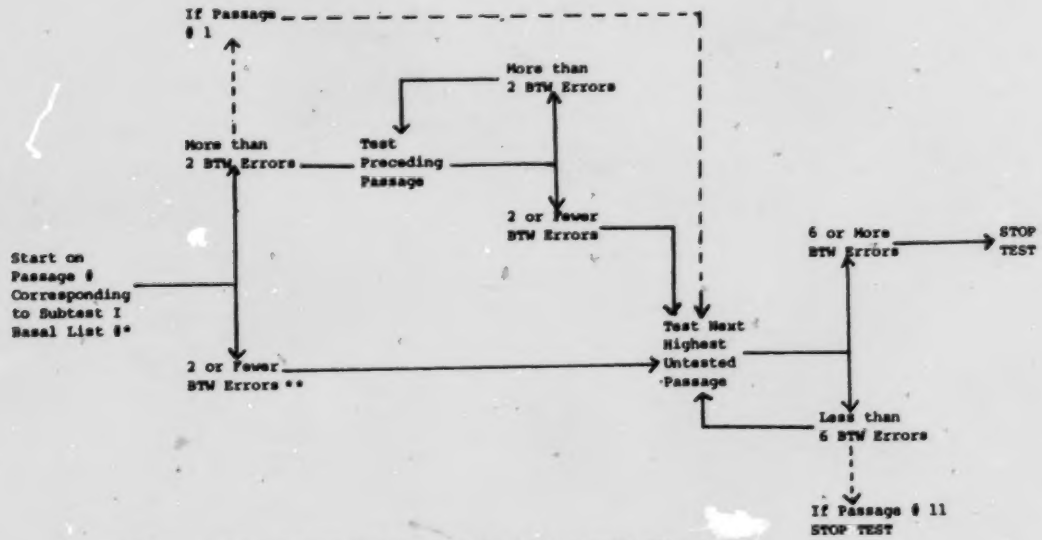
Item #	Word	Response	Code	Col. #	Item #	Word	Response	Code	Col. #
	(blank column)		----	68		*(blank column)*		----	35
1-1	hit		1	69	7-1	visit		1	36
1-2	fed		1	70	7-2	pencil		1	37
1-3	nut		1	71	7-3	mitten	mister	7	38
1-4	jog		1	72	7-4	puppet	puppy	7	39
1-5	lag		2	73	7-5	combat	tumbar	6	40
2-1	shut		1	74	8-1	finish	finter	7	41
2-2	path		1	75	8-2	pumpkin		2	42
2-3	stack		2	76	8-3	publish	—	4	43
2-4	flesh		1	77	8-4	splendid	—	4	44
2-5	prop		3	78	8-5	stiffen	—	4	45
	(blank columns)			79-80					
	(blank column)		----	13		*(blank column)*		----	46
3-1	hide		1	14	9-1	beside	bester	7	47
3-2	cute	kut	5	15	9-2	mistake	muster	7	48
3-3	doze		1	16	9-3	confuse	copy	7	49
3-4	fake	flake	6	17	9-4	rotate	rol	7	50
3-5	tone		2	18	9-5	awake	awate	7	51
4-1	brave		1	19	10-1	telephone	telfus	7	52
4-2	drove		1	20	10-2	grateful	krksul	6	53
4-3	flake		2	21	10-3	provide			54
4-4	globe	glbz	7	22	10-4	explode			55
4-5	crime		2	23	10-5	demonstrate			56
	(blank column)		----	24		*(blank column)*		----	57
5-1	loud		1	25	11-1	tower			58
5-2	join		1	26	11-2	rooster			59
5-3	raw		2	27	11-3	sausage			60
5-4	loaf		1	28	11-4	avoid			61
5-5	bail	—	4	29	11-5	announcer			62
6-1	threw		1	30	12-1	flower			63
6-2	grain	grtp	6	31	12-2	complain			64
6-3	choice	chiss	5	32	12-3	creature			65
6-4	bound	baught	7	33	12-4	embroider			66
6-5	preach	ptch	6	34	12-5	trouser			67

(go to p. 5)

SUBTEST III

Passage Sequence Diagram. Figure 3 shows the sequence for the administration of passages in Subtest III. The Tester begins on the passage number that corresponds to the Basal Level list number on Subtest I (see Establishing Subtest I Basal Level, page 8). For example, the child in Sample Protocol #2 (page 15) obtained a Basal Level at List #4. Therefore, the Tester would begin Subtest III on Passage #4. After a passage has been administered, the Tester enters the appropriate Response Codes for the Basal Target Words on that passage (see Appendix H) and determines which passage (if any) should be administered next. The sequence of administration of passages is *always* determined by the number of Basal Target Word errors the child makes.

It will be noted in Figure 3 that Subtest III is not administered when the child's Basal Level is below List #1 ((-B)). Thus, the child in Sample Protocol #5 would not be given Subtest III. It will also be noted if the child's Basal Level on Subtest I is above List #11 ((B+)), Subtest III is begun on Passage #10. The child in Sample Protocol #4 would read Passage #10 first.


If Passage # 1
More than 2 BTW Errors
More than 2 BTW Errors
Test Preceding Passage
2 or Fewer BTW Errors
6 or More BTW Errors
STOP TEST
Start on Passage # Corresponding to Subtest I Basal List #*
Test Next Highest Untested Passage
2 or Fewer BTW Errors **
Less than 6 BTW Errors
If Passage # 11 STOP TEST

*If Subtest I Basal Level is below List # 1 (-B), Subtest III not given.
If Subtest I Basal Level is above List #11 (B+), start on Passage # 10.

**Only Basal Target Words (BTW) are considered in determining sequence of passage administration in Subtest III.

Figure 3 (Also Appendix K). Sequence of passage administration in Subtest III.

Sample Protocol. Sample Protocol #7 shows Basal Target Word Lists #5, #6, #7, #8, and #9 which have been abstracted from the Test Protocol of the child in Sample Protocol #1. The Tester determined that the child's Basal Level in Subtest I was List #6, and so he began Subtest III with Passage #6. However, the child made 3 Basal Target Word errors on Passage #6, so the Tester asked the child to read Passage #5. (Had the child made only 2 errors, the Tester would not have asked him to read Passage #5.) On Passage #5, the child made 2 Basal Target Word errors. The Tester continued to administer passages (after Passage #6) up through Passage #8, on which the child made *more than* 5 Basal Target Word errors. The Tester stopped Subtest III at this point, so all passages after #8 were not administered.

SAMPLE PROTOCOL # 7

Basal Target Words

Item#	Word	Code	Col.#	Item #	Word	Code	Col.#
(blank column)		___	64				
5-B1	knew	1	65	5-B6	star	7	70
5-B2	strong	5	66	5-B7	else	1	71
5-B3	short	1	67	5-B8	angry	1	72
5-B4	space	2	68	5-B9	banana	2	73
5-B5	almost	1	69	5-B10	able	1	74

Basal Target Words

Item#	Word	Code	Col.#	Item #	Word	Code	Col.#
(blank column)		___	13				
6-B1	daughter	1	14	6-B6	field	1	19
6-B2	earn	4	15	6-B7	finally	1	20
6-B3	indeed	2	16	6-B8	sneeze	5	21
6-B4	problem	7	17	6-B9	famous	1	22
6-B5	worry	2	18	6-B10	crowds	2	23

Basal Target Words

Item#	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)		___	30				
7-B1	shelter	2	31	7-B6	coin	1	36
7-B2	protect	1	32	7-B7	naturally	2	37
7-B3	square	1	33	7-B8	arrived	1	38
7-B4	muttering	6	34	7-B9	bounce	1	39
7-B5	prove	1	35	7-B10	pleasant	7	40

Basal Target Words

Item#	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)		___	47				
8-B1	detective	1	48	8-B6	custom	7	53
8-B2	project	2	49	8-B7	stalk	7	54
8-B3	pace	5	50	8-B8	shallow	6	55
8-B4	area	1	51	8-B9	bush	1	56
8-B5	stern	7	52	8-B10	design	5	57

Basal Target Words

Item#	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)		___	64				
9-B1	glared	___	65	9-B6	resolve	___	70
9-B2	instructions	___	66	9-B7	dignity	___	71
9-B3	contact	___	67	9-B8	abandoned	___	72
9-B4	furnished	___	68	9-B9	extend	___	73
9-B5	strides	___	69	9-B10	justice	___	74

CHAPTER 5 SCORING PROCEDURES (2) AFTER TEST ADMINISTRATION

SUBTEST I

Response Codes. The Tester enters all Response Codes for all unadministered items (Codes 8 and 9; see Appendix B) and for any items that have not already been coded (e.g., Codes 5, 6, and 7). Code 8 is entered for all untested items below the Basal Level list, and Code 9, for all items above the last list that the child read (Ceiling Level list).

Total Correct Responses. The sum of the number correct (Codes 1+2+3+8) on each list of 10 words is written to the right of each list. The total number of correct responses for all Subtest I items (the sum of the total correct on each list) is then written below List #11 on page 3 of the Test Protocol.

Establishing Subtest I Ceiling Level. The Tester locates the highest list given. If the score is less than 5 correct, this is the Ceiling Level list. This list is labeled (C). If the child did not score less than 5 correct on any list, (C+) is written next to List #11. Thus, a child who scored 8 or more correct on all lists would have (B+) as well as (C+) written next to List #11, while a child who scored less than 5 correct on List #1 would have (-B) as well as (C) written next to List #1.

Sample Protocol. Sample Protocol #2 (with the second page added) is shown below, with the procedures discussed above completed.

SAMPLE PROTOCOL # 2 (version 2)

BASAL WORD RECOGNITION (SUBTEST I)

Item #	Word	Response	Code	Col. #
		(blank column)	----	13 (10)
1- 1	to		1	14
1- 2	yes		1	15
1- 3	the		1	16
1- 4	up		1	17
1- 5	a		1	18
1- 6	in		1	19
1- 7	at		1	20
1- 8	it		1	21
1- 9	is		1	22
1-10	I		1	23
		(blank column)	----	24
2- 1	so		1	25 (10)
2- 2	was		1	26
2- 3	went		1	27
2- 4	let		1	28
2- 5	box		1	29
2- 6	she		1	30
2- 7	no		1	31
2- 8	am		1	32
2- 9	help		1	33
2-10	jump		1	34
		(blank column)	----	35
3- 1	sing		2	36 (8)
3- 3	when		1	37
3- 3	next		1	38
3- 4	thing	thin	6	39
3- 5	I'll		1	40
3- 6	now		1	41
3- 7	other	another	7	42
3- 8	best		1	43
3- 9	new		1	44
3-10	long		1	45
		(blank column)	----	46 (B)
4- 1	shop		1	47
4- 2	fine	fin	5	48 (8)
4- 3	end		1	49
4- 4	part	pur	6	50
4- 5	dear		1	51
4- 6	dry		1	52
4- 7	wood		1	53
4- 8	better		2	54
4- 9	begin		2	55
4-10	start		1	56

Item #	Word	Response	Code	Col. #
		(blank column)	----	57 (6)
5- 1	strong		1	58
5- 2	able	abil	5	59
5- 3	almost		1	60
5- 4	angry	agre	7	61
5- 5	star		1	62
5- 6	space		1	63
5- 7	else	elis	5	64
5- 8	knew		2	65
5- 9	short	shor	7	66
5-10	banana		1	67
		(blank column)	----	68 (C)
6- 1	famous	fame	7	69
6- 2	daughter	dirty	7	70 (3)
6- 3	crowd	krin	7	71
6- 4	indeed		2	72
6- 5	field	find	6	73
6- 6	finally	finest	7	74
6- 7	sneeze		1	75
6- 8	earn	ern	7	76
6- 9	problem		2	77
6-10	worry		4	78
		(blank column)	----	79-80
		(card number) 0 3		1-2
		(blank column)	----	3
		(ID #)		4-12
		(blank column)	----	13 (0)
7- 1	natural		9	14
7- 2	mutter		9	15
7- 3	coin		9	16
7- 4	prove		9	17
7- 5	bounce		9	18
7- 6	pleasant		9	19
7- 7	arrive		9	20
7- 8	shelter		9	21
7- 9	square		9	22
7-10	protect		9	23

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(continued)

(continued)

Page 3

BASAL WORD RECOGNITION (SUBTEST I)

Item #	Word	Response	Code	Col. #	Item #	Word	Response	Code	Col. #
	(blank column)		----	24		*(blank column)*		----	46
8- 1	stalk		9	25	10- 1	frequent		9	47
8- 2	project		9	26	10- 2	purchase		9	48
8- 3	stern		9	27	10- 3	advertize		9	49
8- 4	shallow		9	28	10- 4	quality		9	50
8- 5	pace		9	29	10- 5	terrify		9	51
8- 6	area		9	30	10- 6	vast		9	52
8- 7	custom		9	31	10- 7	emergency		9	53
8- 8	bush		9	32	10- 8	ridge		9	54
8- 9	detective		9	33	10- 9	reckon		9	55
8-10	design		9	34	10-10	confident		9	56
	(blank column)		----	35		*(blank column)*		----	57
9- 1	instruction		9	36	11- 1	continent		9	58
9- 2	contact		9	37	11- 2	trudge		9	59
9- 3	glare		9	38	11- 3	desperate		9	60
9- 4	furnish		9	39	11- 4	awkward		9	61
9- 5	justice		9	40	11- 5	distress		9	62
9- 6	extend		9	41	11- 6	cautious		9	63
9- 7	resolve		9	42	11- 7	doubt		9	64
9- 8	stride		9	43	11- 8	solemn		9	65
9- 9	dignity		9	44	11- 9	prairie		9	66
9-10	abandon		9	45	11-10	swollen		9	67

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SUBTEST II

Response Codes. The Response Codes for all unadministered items (Code 9) and for any items that have not already been coded (e.g., Codes 5, 6, and 7) are entered. Code 9 is entered for all untested items (all items after the child has made 10 consecutive errors). Code 8 is not used in Subtest II, since every child begins both sections of the subtest with the first words (i.e., "hit" and "jit").

Total Correct Responses. The sum of the number correct (Codes 1+2+3) on each list of 5 words, on both the Real and Nonsense Word sections, is written to the right of each list. The total number correct for the items on the following lists are then derived:

1. The first 6 lists (Items 1-1 through 6-5) on the Real Word section. This number is written below Item 6-5 ("preach").

2. The last 6 lists (Items 7-1 through 12-5) on the Real Word section. This number is written below Item 12-5 ("trouser").

3. The first 6 lists (Items 1-1 through 6-5) on the Nonsense Word section. This number is written below Item 6-5 ("fleach").

4. The last 6 lists (Items 7-1 through 12-5) on the Nonsense Word section. This number is written below Item 12-5 ("clouser").

These sums are shown on Sample Protocol #6 (version 2) on the following two pages.

Sample Protocol. Sample Protocol #6 (with the Nonsense Word page added) is shown on these two pages with the procedures described above completed.

SAMPLE PROTOCOL # 6 (version 2) Page 4

PHONIC DECODING--REAL WORDS (SUBTEST II)

Item #	Word	Response	Code	Col. #	Item #	Word	Response	Code	Col. #
	(blank column)		----	68		*(blank column)*		----	35
1-1	hit		1	69	7-1	visit		1	36
1-2	fed		1	70 (5)	7-2	pencil		1	37 (2)
1-3	nut		1	71	7-3	mitten	mister	7	38
1-4	jog		1	72	7-4	puppet	puppy	7	39
1-5	lag		2	73	7-5	combat	kumbat	6	40
2-1	shut		1	74	8-1	finish		7	41
2-2	path		1	75 (5)	8-2	pumpkin		2	42 (1)
2-3	stack		2	76	8-3	publish		4	43
2-4	flash		1	77	8-4	splendid		4	44
2-5	prop		3	78	8-5	stiffen		4	45
	(blank columns)			79-80					
	(card number)		0 4	1-2					
	(blank column)		----	3					
	(ID #)			4-12					
	(blank column)		----	13		*(blank column)*		----	46
3-1	hide		1	14	9-1	beside	baster	7	47
3-2	cute	kiut	5	15 (3)	9-2	mistake	muster	7	48 (0)
3-3	doze		1	16	9-3	confuse	copy	7	49
3-4	fake	fiek	6	17	9-4	rotate	rat	7	50
3-5	tone		3	18	9-5	awake	aware	7	51
4-1	brave		1	19	10-1	telephone	telfua	7	52
4-2	drove		1	20 (4)	10-2	grateful	KRKful	6	53 (0)
4-3	flake		3	21	10-3	provide		9	54
4-4	globe	gobe	7	22	10-4	explode		9	55
4-5	crime		2	23	10-5	demonstrate		9	56
	(blank column)		----	24		*(blank column)*		---	57
5-1	loud		1	25	11-1	tower		9	58
5-2	join		1	26 (4)	11-2	rooster		9	59 (0)
5-3	raw		2	27	11-3	sausage		9	60
5-4	loaf		1	28	11-4	avoid		9	61
5-5	bail		4	29	11-5	announcer		9	62
6-1	threw		1	30	12-1	flower		9	63
6-2	grain	grab	6	31 (1)	12-2	complain		9	64 (0)
6-3	choice	kkas	5	32	12-3	creature		9	65
6-4	bound	bought	7	33	12-4	embroider		9	66
6-5	preach	prkh	6	34	12-5	trouser		9	67

(go to 1.5)

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(continued)

(continued)

Page 5

PHONIC DECODING -NONSENSE WORDS (SUBTEST II)

Item #	Word	Response	Code	Col. #		Item #	Word	Response	Code	Col. #	
	(blank column)		----	68			(blank column)		----	35	
1-1	jit		1	69		7-1	lisit		1	36	
1-2	med		1	70	(4)	7-2	jencil		1	37	(3)
1-3	dut	dat	5	71		7-3	pitten	pïten	5	38	
1-4	nog		1	72		7-4	duppet		1	39	
1-5	pag		1	73		7-5	vombat	vaubat	7	40	
2-1	thut		2	74		8-1	brinish		1	41	
2-2	sath		1	75	(4)	8-2	thumpkin		2	42	(2)
2-3	glick		1	76		8-3	sublish	sɔplish	7	43	
2-4	blesh	blish	7	77		8-4	glendid	glisal	7	44	
2-5	brop		2	78		8-5	bliffen	—	4	45	
	(blank columns)		----	79-80							
	(card number)	0 5		1-2							
	(blank column)		----	3							
	(ID #)			4-12							
	(blank column)		----	13			(blank column)		----	46	
3-1	mide	midē	5	14		9-1	semide	sumidē	6	47	(0)
3-2	fute		2	15	(3)	9-2	fistake	fister	7	48	
3-3	voze		1	16		9-3	monfuse	mɔfusē	7	49	
3-4	pake	brak	7	17		9-4	metate	mɔstat	7	50	
3-5	sone		2	18		9-5	aboke	aKɔK	6	51	
4-1	clave		1	19		10-1	delephote	delepɔt	6	52	
4-2	chove	shuv	7	20	(3)	10-2	clateful	clatiter	7	53	(0)
4-3	grake		2	21		10-3	drovide		9	54	
4-4	trobe	tɔbb	7	22		10-4	excrode		9	55	
4-5	drime		1	23		10-5	bemonthrate		9	56	
	(blank column)		----	24			(blank column)		----	57	
5-1	roud	rud	5	25		11-1	zover		9	58	
5-2	zoin	zɔin	5	26	(2)	11-2	cooster		9	59	(0)
5-3	taw		2	27		11-3	wausage		9	60	
5-4	woaf		1	28		11-4	atoid		9	61	
5-5	dail	dalē	5	29		11-5	azzounder		9	62	
6-1	prew	prewit	7	30		12-1	strover		9	63	
6-2	thrain	thrɔn	6	31	(0)	12-2	lomprain		9	64	(0)
6-3	froice	frɔzē	7	32		12-3	threature		9	65	
6-4	spound	spɔɔn	7	33		12-4	enfroider		9	66	
6-5	fleach	felch	7	34		12-5	clouser		9	67	

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SUBTEST III

Response Codes. The Response Codes for all Basal Target Word items in the passages that were actually read should have already been entered (see Chapter 3, page 10). The appropriate Response Codes for the Phonic Target Word items in these passages, as well as the Codes for all Target Word items in passages that were not administered, are now entered. Code 8 is used for Target Words that are in passages below the first passage the child read (i.e., untested items below Basal Level). Code 9 is used for all Target Words in passages above the last passage the child read (i.e., items above Ceiling Level).

Total Correct Target Word Responses. On each passage, the total number of correct Basal Target Words (out of 10) is written at the top of the Basal Target Word list. The total number of correct Phonic Target Words (out of 6) is also entered at the top of the Phonic Target Word list. This is done for the Target Words in untested passages below the Basal Level as well as for those in passages above the Ceiling Level.

Passage Errors. On each passage that was read, the Passage Errors are now marked with the labels shown in Appendix E. (It is helpful to use red pen, so that the errors are clearly identifiable.) After each error has been labeled, the numbers of errors of each specific type are entered in the appropriate spaces under "Passage Errors" on the Test Protocol. The total number of Passage Errors (of all types) is also entered.

Sample Protocol. Sample Protocol #1 is shown on the following page with the procedures discussed above completed.

SAMPLE PROTOCOL # 1 (version 2)

ORAL PASSAGES (SUBTEST III)

Passage # 5

Farmer Gray called Farmer John to complain about the rooster he got from Farmer John.

"I knew that bird was strong," said Farmer Gray over the telephone, but he eats and eats. In a short space of time, almost all the food in the house is gone!"

"But that is a super rooster," said Farmer John.

"But he's got to go!" said Farmer Gray. "I don't know what else to do!" He was angry now.

"Where is the rooster now?" asked Farmer John.

"He's up in the barn tower eating a banana and a flower. He eats flowers too," said Farmer Gray.

"I'll come and get him as soon as I am able to," said Farmer John.

"Thank you. I'm grateful," said Farmer Gray.

Card 08 (continued)

Basal Target Words (8)

Item #	Word	Code	Col.#	Item #	Word	Code	Col.#
(blank column)			64				
5-B1	knew	/	65	5-B6	star	/	70
5-B2	strong	S	66	5-B7	else	/	71
5-B3	short	/	67	5-B8	angry	/	72
5-B4	space	2	68	5-B9	banana	2	73
5-B5	almost	/	69	5-B10	able	/	74

Phonic Target Words (5)

Item #	Word	Code	Col.#
5-P1	complain	2	75
5-P2	rooster	/	76
5-P3	telephone	/	77
5-P4	tower	/	78
5-P5	flower	/	79
5-P6	grateful	0	80

(go to p. 11)

Card 10 (continued)

PASSAGE SCORES

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Error Substitution	dog	ES	2	43-44
Word Omission	dog	O	2	45-46
Meaningful Substituion	cat dog	MS	3	47-48
Transformation	has	T	5	49-50
Word Addition		WA	2	51-52
		(blank column)		53
Passage Time	minutes		1	54-55
	seconds		10	56-57
	(blank column)			58

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Inversion	I am	I	0	59-60
Repetition	dog	R	2	61-62
Hesitation/ Self-Correction	dog	HS	3	63-64
Redirection	[ ]	RED	0	65-66
Punctuation	⊙ ?	P	1	67-68
Total # Passage Errors			20	69-70
(blank columns)				71-80

(go to p. 11)

Establishing Subtest III Basal Level. The Tester locates the lowest passage in which the child scored *less than* 8 Basal Target Words correct. The passage *just prior* to this is the Basal Level passage. This passage is labeled with (B) at the top of the page in the Test Protocol. There are three situations in which there is no Basal Level passage:

1. If the child scored less than 8 Basal Target Words correct on Passage #1. (-B) is written at the top of Passage #1.

2. If the child scored 8 or more Basal Target Words correct on all Passages. (B+) is written at the top of Passage #11.

3. If the child did not achieve a Basal Level on Subtest I (in which case (-B) is written at the top of List #1), Subtest III is not administered. "No Subtest III" is written at the top of Passage #1.

Establishing Subtest III Ceiling Level. The Tester locates the highest passage read. If the Basal Target Word score is less than 5 correct, this is the Ceiling Level passage. (C) is written at the top of this passage. If the child did not score less than 5 Basal Target Words correct on any passage, (C+) is written at the top of Passage #11. Thus, a child who had scored 8 or more Target Words correct on all passages would have (B+) as well as (C+) written at the top of List #11, while a child who had scored less than 5 Basal Target Words correct on Passage #1 would have (-B) as well as (C) written at the top of Passage #1.

Sample Protocol. Sample Protocol #7 is shown on the following page with the Basal Level and Ceiling Level passages indicated. The appropriate code for items above Ceiling Level (Code 9) has also been entered for the Basal Target Word items in Passage #9.

SAMPLE PROTOCOL # 7

(version 2)

Basal Target Words (B)

Item#	Word	Code	Col.#	Item #	Word	Code	Col.#
(blank column)			64				
5-B1	knew	1	65	5-B6	star	7	70
5-B2	strong	3	66	5-B7	else	1	71
5-B3	short	1	67	5-B8	angry	1	72
5-B4	space	2	68	5-B9	banana	2	73
5-B5	almost	1	69	5-B10	able	1	74

Basal Target Words

Item#	Word	Code	Col.#	Item #	Word	Code	Col.#
(blank column)			13				
6-B1	daughter	1	14	6-B6	field	1	19
6-B2	earn	4	15	6-B7	finally	1	20
6-B3	indeed	2	16	6-B8	sneeze	5	21
6-B4	problem	7	17	6-B9	famous	1	22
6-B5	worry	2	18	6-B10	crowds	2	23

Basal Target Words

Item#	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)			30				
7-B1	shelter	2	31	7-B6	coin	1	36
7-B2	protect	1	32	7-B7	naturally	2	37
7-B3	square	1	33	7-B8	arrived	1	38
7-B4	muttering	6	34	7-B9	bounce	1	39
7-B5	prove	1	35	7-B10	pleasant	7	40

Basal Target Words (C)

Item#	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)			47				
8-B1	detective	1	48	8-B6	custom	7	53
8-B2	project	2	49	8-B7	stalk	7	54
8-B3	pace	5	50	8-B8	shallow	6	55
8-B4	area	1	51	8-B9	bush	1	56
8-B5	stern	7	52	8-B10	design	5	57

Basal Target Words

Item#	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)			64				
9-B1	glared	9	65	9-B6	resolve	9	70
9-B2	instructions	9	66	9-B7	dignity	9	71
9-B3	contact	9	67	9-B8	abandoned	9	72
9-B4	furnished	9	68	9-B9	extend	9	73
9-B5	strides	9	69	9-B10	justice	9	74

CHAPTER 6 FILLING IN THE DIAGNOSTIC SCORING INFORMATION

SUBTEST I

The child's performance on Sample Protocol #2 (see pages 22-23) has been used to fill in the "Diagnostic Scoring Information" that relates to Subtest I.

INFORMATION RELATED TO BASAL READER INSTRUCTION

	Raw Score	Estimated Instructional Level	Estimated Frustration Level	Passage Errors at Instructional Level	Phonic Word Score at Instructional Level
Basal Words in Isolation	45/110	2-1	3-1		
Basal Words in Oral Reading	/110				/6

The 3 spaces across from "Basal Words in Isolation" refer to the child's performance on Subtest I:

Raw Score. The total number of correct responses (out of 110) is entered in this space. This number has been totaled on the Test Protocol. In Sample Protocol #2, the child's total Raw Score on Subtest I was 45.

Estimated Instructional Level. The list numbers on Subtest I can be translated into Reader Levels as follows:

Table 4

Conversion of List Numbers to Reader Levels

List Number	*Reader Level*	*Expected Grade Placement*
1	PP (Preprimer)	Beginning First Grade
2	P (Primer)	Middle of First Grade
3	1 (First Reader)	Late First Grade
4	2-1 (Two-One Reader)	First Half of Second Grade
5	2-2 (Two-Two Reader)	Last Half of Second Grade
6	3-1 (Three-One Reader)	First Half of Third Grade
7	3-2 (Three-Two Reader)	Last Half of Third Grade
8	4-1 (Four-One Reader)	First Half of Fourth Grade
9	4-2 (Four-Two Reader)	Last Half of Fourth Grade
10	5-1 (Five-One Reader)	First Half of Fifth Grade
11	5-2 (Five-Two Reader)	Last Half of Fifth Grade

The Reader Level that corresponds to the child's Basal Level list number is entered in this space. If the child obtained a Basal Level below List #1 (-B), -PP is entered in this space. If the child obtained a Basal Level above List #11, then 5-2+ is entered. In Sample Protocol #2, the child obtained a Basal Level at List #4; this translates into a Reader Level of 2-1.

Estimated Frustration Level. The Reader Level that corresponds to the child's Ceiling Level list number is entered in this space. If the child obtained a Ceiling Level above List #11, make no entry in this space. In Sample Protocol #2, the child reached Ceiling Level at List #6; this translates into a Reader Level of 3-1.

SUBTEST III

The child's performance on Sample Protocols #1 (see page 27) and #7 (page 29) has been used to fill in the "Diagnostic Scoring Information" that relates to Subtest III.

INFORMATION RELATED TO BASAL READER INSTRUCTION

	Raw Score	Estimated Instructional Level	Estimated Frustration Level	Passage Errors at Instructional Level	Phonic Word Score at Instructional Level
Basal Words in Isolation	___/110	_____	_____		
Basal Words in Oral Reading	67/110	2-2	4-1	20	5/6
Comprehension scores at:		5/5	3/5		

The 5 spaces across from "Basal Words in Oral Reading" as well as the 2 across from "Comprehension Scores" refer to the child's performance on Subtest III:

Raw Score. The total number of correct Basal Target Words (out of 110) is entered in this space. For the child in Sample Protocol #7, all of the Basal Target Words below Passage #5 are assumed correct; all those above Passage #8 are assumed incorrect. Thus, the total number of correct Basal Target Words for this child is 67 (40+8+7+8+4+0).

Estimated Instructional Level. The "Conversion of List Numbers to Reader Levels" table (Table 4) used for Subtest I is also used here. The Reader Level that corresponds to the child's Basal Level passage number is entered in this space. If the child obtained a Basal Level below Passage #1, or if Subtest III was not given, then -PP is entered in this space. If the child obtained a Basal Level above List #11, then 5-2+ is entered. The child in Sample Protocol #7 obtained a Basal Level at Passage #5; this translates into a Reader Level of 2-2.

Estimated Frustration Level. The Reader Level that corresponds to the child's Ceiling Level passage number is entered in this space. If the child obtained a Ceiling Level above Passage #11, make no entry in this space. In Sample Protocol #7, the child reached Ceiling Level at Passage #8; this translates into a Reader Level of 4-1.

Passage Errors at Instructional Level. The total number of Passage Errors that the child made on the Basal Level passage is entered here. The child in Sample Protocol #7 obtained Basal Level at Passage #5, and this passage is shown in Sample Protocol #1. The total number of Passage Errors on this passage is 20.

Phonic Word Score at Instructional Level. The number of correct Phonic Target Words on the Basal Level passage is entered here. As Sample Protocol #1 shows, this child scored 5 Phonic Target Words correct on this passage.

Comprehension Score at Estimated Instructional Level. The number of comprehension questions that the child answered correctly on the Basal Level passage is entered here. Although the Comprehension Supplement for this child has not been presented, we have supposed that all 5 questions were answered correctly on Passage #5.

Comprehension Score at Estimated Frustration Level. The number of comprehension questions that the child answered correctly at the Ceiling Level passage is entered here. We have supposed that this child answered 3 of the questions correctly on Passage #8.

SUBTEST II

The child's performance on Sample Protocol #6 (see pages 24-25) has been used to fill in the "Diagnostic Scoring Information" related to Subtest II.

INFORMATION RELATED TO PHONIC DECODING ABILITY

	Monosyllabic Real Words	Monosyllabic Nonsense Words	Polysyllabic Real Words	Polysyllabic Nonsense Words
Phonic Decoding Summary	22/30	16/30	3/30	5/30

	CVC	CCVCC	CVCe	CCVCe	CVVC	CCVVCC
Monosyllabic Real Words	5/5	5/5	3/5	4/5	4/5	1/5
Monosyllabic Nonsense Words	4/5	4/5	3/5	3/5	2/5	0/5
Polysyllabic Real Words	2/5	1/5	0/5	0/5	0/5	0/5
Polysyllabic Nonsense Words	3/5	2/5	0/5	0/5	0/5	0/5

All of the spaces below "Information Related to Phonic Decoding Ability" refer to the child's performance on Subtest II:

Phonic Decoding Summary. The 4 spaces across from "Phonic Decoding Summary" refer to the total number correct on the 4 subdivisions of Subtest II. These numbers have been totaled on the Test Protocol (see pages 24-25). They are:

1. MONOSYLLABIC REAL WORDS (out of 30). The total number of correct monosyllabic real words (Real Word Items 1-1 through 6-5) is entered in this space. The child in Sample Protocol #6 was correct on 22 of these 30 items.

2. MONOSYLLABIC NONSENSE WORDS (out of 30). The total number of correct monosyllabic nonsense words (Nonsense Word Items 1-1 through 6-5) is entered in this space. The child in Sample Protocol #6 was correct on 16 of these 30 items.

3. POLYSYLLABIC REAL WORDS (out of 30). The total number of correct polysyllabic real words (Real Word Items 7-1 through 12-5) is entered in this space. The child in the Sample Protocol was correct on 3 of these 30 items.

4. POLYSYLLABIC NONSENSE WORDS (out of 30). The total number of correct polysyllabic nonsense words (Nonsense Word Items 7-1 through 12-5) is entered here. This child was correct on 5 of these 30 items.

Monosyllabic Real Words. The 6 spaces across from "Monosyllabic Real Words" refer to the number correct on each of the 6 monosyllabic Real Word lists. These numbers have been totaled on the Test Protocol (see page 24). They are:

1. CVC WORDS (out of 5). The total correct on the first Real Word list (Real Word Items 1-1 through 1-5). As Sample Protocol #6 shows, the child was correct on all 5 of these items.

2. CCVCC WORDS (out of 5). The total correct on the second Real Word list (Real Word Items 2-1 through 2-5). As Sample Protocol #6 shows, the child was correct on all 5 of these items.

3. CVC$\not$ WORDS (out of 5). The total correct on the third Real Word list (Real Word Items 3-1 through 3-5). The child was correct on 3 of these items.

4. CCVC$\not$ WORDS (out of 5). The total correct on the fourth Real Word list (Real Word Items 4-1 through 4-5). The child was correct on 4 of these items.

5. CVVC WORDS (out of 5). The total correct on the fifth Real Word list (Real Word Items 5-1 through 5-5). The child was correct on 4 of these items.

6. CCVVCC WORDS (out of 5). The total correct on the sixth Real Word list (Real Word Items 6-1 through 6-5). The child was correct on 1 of these items.

Monosyllabic Nonsense Words. The 6 spaces across from "Monosyllabic Nonsense Words" refer to the number correct on each of the 6 monosyllabic Nonsense Word lists. These numbers have been totaled on the Test Protocol. They are:

1. CVC NONSENSE WORDS (out of 5). The total correct on the first Nonsense Word list (Nonsense Word Items 1-1 through 1-5). The child was correct on 4 of these items.

2. CCVCC NONSENSE WORDS (out of 5). The total correct on the second Nonsense Word list (Nonsense Word Items 2-1 through 2-5). The child was correct on 4 of these items.

3. CVC$\not$ NONSENSE WORDS (out of 5). The total correct on the third Nonsense Word list. The child was correct on 3 of these items.

4. CCVC$\not$ NONSENSE WORDS (out of 5). The total correct on the fourth Nonsense Word list. The child was correct on 3 of these items.

5. CVVC NONSENSE WORDS (out of 5). The total correct on the fifth Nonsense Word list. The child was correct on 2 of these items.

6. CCVVCC NONSENSE WORDS (out of 5). The total correct on the sixth Nonsense Word list. The child was correct on none of these items.

Polysyllabic Real Words. The 6 spaces across from "Polysyllabic Real Words" refer to the number correct on each of the 6 polysyllabic Real Word lists. These numbers have been totaled on the Test Protocol. They are:

1. CVC WORDS (out of 5). The total correct on the seventh Real Word list (Real Word Items 7-1 through 7-5). The child was correct on 2 of these items.

2. CCVCC WORDS (out of 5). The total correct on the eighth Real Word list (Real Word Items 8-1 through 8-5). The child was correct on 1 of these items.

3. CVC$\not$ WORDS (out of 5). The total correct on the ninth Real Word list (Real Word Items 9-1 through 9-5). The child was correct on none of these items.

4. CCVC$\not$ WORDS (out of 5). The total correct on the tenth Real Word list. The child was correct on none of these items.

5. CVVC WORDS (out of 5). The total correct on the eleventh Real Word list.

The child was incorrect on all items in this list.

6. CCVVCC WORDS (out of 5). The total correct on the twelfth Real Word list. The child was correct on none of these items.

Polysyllabic Nonsense Words. The 6 spaces across from "Polysyllabic Nonsense Words" refer to the number correct on each of the 6 Polysyllabic Nonsense Word lists. These numbers have been totaled on the Test Protocol. They are:

1. CVC NONSENSE WORDS (out of 5). The total correct on the seventh Nonsense Word list (Nonsense Word Items 7-1 through 7-5). The child was correct on 3 of these items.

2. CCVCC NONSENSE WORDS (out of 5). The total correct on the eighth Nonsense Word list (Nonsense Word Items 8-1 through 8-5). The child was correct on 2 of these items.

3. CVC$\not$ NONSENSE WORDS (out of 5). The total correct on the ninth Nonsense Word list. The child scored none correct.

4. CCVC$\not$ NONSENSE WORDS (out of 5). The total correct on the tenth Nonsense Word list. The child scored none correct.

5. CVVC NONSENSE WORDS (out of 5). The total correct on the eleventh Nonsense Word list. The child scored none correct.

6. CCVVCC NONSENSE WORDS (out of 5). The total correct on the twelfth Nonsense Word list. The child scored none correct.

CHAPTER 7 INTERPRETING THE DIAGNOSTIC SCORING INFORMATION

This chapter deals with the diagnostic-prescriptive uses of the DST and is primarily directed at teachers of reading disabled children who wish to use the instrument in this fashion. The test scores that are entered on the cover page of the Test Protocol may be used to make a number of judgments regarding the child's reading ability. These scores indicate: (a) the general level of reading vocabulary and approximate Reader Level placement within most basal reader programs; (b) familiarity with the most common spelling-to-sound correspondence patterns in the language, as well as the ability to apply this knowledge in decoding unknown words; (c) overall fluency of oral reading, as well as the ability to apply phonics in the context of oral reading; and (d) strength of "simple recall" comprehension in oral reading.

Sample Protocol #8, on the following page, shows the Diagnostic Scoring Information page from the Protocol of a Fourth Grader. The top of the page shows the child's name, school, grade, room number, sex, and age at the time of testing. The space provided for ID# may be used if the Protocol is to be used for research purposes. The diagnostic scores have been entered using the guidelines discussed in Chapter 6. The scores are divided into two categories: (a) scores related to basal reader instruction and (b) scores related to phonic decoding ability. At the very bottom of the page are the "Diagnostic-Prescriptive Information Codes" (to be discussed later in this chapter) which are based on the analyses of the various scores.

SCORES RELATED TO BASAL READER INSTRUCTION

The scores in this category are derived from Subtests I and III. Together they constitute an estimate of the child's ability to read the material presented in most basal reader programs in Grades One through Five.

Basal Words in Isolation. These three scores refer to the child's performance on Subtest I. Since the words presented in this subtest are representative of the basal vocabulary covered in Grades One through Five, and since they are presented individually, they are "Basal Words in Isolation."

1. RAW SCORE. This score shows the total number of correct responses to the 110 words in Subtest I. Scores below 20 indicate that the child is a beginning reader, while scores above 100 indicate that the child can decode most basal vocabulary words. The Subtest I Raw Score of the child in Sample Protocol #8 is 75.

2. ESTIMATED INSTRUCTIONAL LEVEL. This is the Reader Level at which the child begins to miss a few words but is probably familiar with most of the words that have been taught. Thus, it is the appropriate level for vocabulary instruction. The Sample Protocol indicates an Instructional Level (on Basal Words in Isolation) of 3-1. This child probably needs instruction in vocabulary beginning at the 3-1 level. A child who scores -PP in this space is unable to read more than a few words. A child who scores 5-2+ can read words at the Fifth Grade level and probably beyond. The actual Instructional Level for such a child cannot be determined by the DST.

3. ESTIMATED FRUSTRATION LEVEL. This is the Reader Level at which the child begins to miss most of the words, indicating that the child is probably not ready for vocabulary instruction at this level. Sample Protocol #8 indicates a Frustration Level (on Basal Words in Isolation) of 4-2. This child should receive vocabulary instruction at earlier levels (i.e., 3-1, 3-2, and 4-1) before moving on to 4-2 material. A child who scores a Frustration Level of -PP is a non-reader. A child whose Instructional Level (on Basal Words in Isolation) is shown as 5-2+ will have no Frustration Level entered. This is because such a child can probably read words above the 5-2 level with no difficulty.

SAMPLE PROTOCOL # 8

DST DIAGNOSTIC SCORING INFORMATION

Child's Name John Jones School P.S. 174 Grade 4 Room 211

FT ID# 1 2 0 6 8 4 1 3 7 Sex M Tester's Initials B.D.

	Month	Day	Year		
Date of Test	___	___	___	Age in Years & Months	___ ___
Date of Birth	___	___	___		
Age Computat.	___	___	___		

INFORMATION RELATED TO BASAL READER INSTRUCTION

	Raw Score	Estimated Instructional Level	Estimated Frustration Level	Passage Errors at Instructional Level	Phonic Word Score at Instructional Level
Basal Words in Isolation	75/110	3-1	4-2		
Basal Words in Oral Reading	76/110	3-2	4-2	30	5/6
Comprehension scores at:		5/5	3/5		

INFORMATION RELATED TO PHONIC DECODING ABILITY

	Monosyllabic Real Words	Monosyllabic Nonsense Words	Polysyllabic Real Words	Polysyllabic Nonsense Words
Phonic Decoding Summary	26/30	20/30	20/30	6/30

	CVC	CCVCC	CVC#	CCVC#	CVVC	CCVVCC
Monosyllabic Real Words	5/5	5/5	4/5	5/5	4/5	3/5
Monosyllabic Nonsense Words	5/5	4/5	3/5	4/5	3/5	1/5
Polysyllabic Real Words	4/5	3/5	4/5	4/5	2/5	3/5
Polysyllabic Nonsense Words	3/5	3/5	0/5	0/5	0/5	0/5

DIAGNOSTIC-PRESCRIPTIVE INFORMATION CODES

Basal Vocabulary Level	Specific Problem Areas	Phonic Decoding Development
4	9,10	15,17,18,19,20

Basal Words in Oral Reading. These five scores refer to the child's performance on Subtest III. Since the Basal Target Words presented in this subtest are representative of the basal vocabulary covered in Grades One through Five, and since they are presented in the context of passages, they are "Basal Words in Oral Reading."

1. RAW SCORE. This is the total number of the 110 Basal Target Words which were decoded correctly in the passages. This score may be compared with the Raw Score on Basal Words in Isolation (Subtest I). If the Oral Reading Raw Score is 5 or more points higher than the Subtest I Raw Score, the child is probably relying heavily on context clues for word recognition. If the Subtest I Raw Score is higher, it indicates that the child is missing words in the context of sentences that he/she can actually decode; that is, *context* is interfering with word recognition. Such a child is probably having considerable difficulty with oral reading, although word recognition may not be the problem. The Subtest III Raw Score of the child in Sample Protocol #8 is 76. This child is able to read approximately the same words in context as he can read in isolation.

2. ESTIMATED INSTRUCTIONAL LEVEL. This is the Reader Level at which the child begins to miss a few words while reading passages at the given level. The child probably needs practice in both oral and silent reading at this level. Thus, it is the appropriate level of instruction in oral reading and should be the child's Reader Level placement. The child in the Sample Protocol scored an Instructional Level (on Basal Words in Oral Reading) of 3-2. However, since the Instructional Level on Subtest I indicates a 3-1 vocabulary level, this child probably needs some practice in the 3-1 reader before moving on to 3-2. A child who obtains an Instructional Level of -PP is unable to read books on the preprimer level. A child who scores 5-2+ can read books at the 5-2 level and probably beyond.

3. ESTIMATED FRUSTRATION LEVEL. This is the Reader Level at which the child missed most of the vocabulary words in the passage at the given level. The child should probably not be asked to read material at this level until more instruction at lower levels has been completed. Sample Protocol #8 indicates a Frustration Level (on Basal Words in Oral Reading) of 4-2. Readers at the 4-2 level will be far too difficult for this child, and materials at lower levels should be presented in instruction. A child who scores a Frustration Level of PP will have **extreme difficulty** with even the simplest reading material. Such a child probably needs further instruction in vocabulary (and "teacher-made" sentences) before any readers can be attempted. A child whose Instructional Level (on Basal Words in Oral Reading) is 5-2+ will have no Frustration Level entered. Such a child can probably read books at the 5-2 level with no difficulty.

4. PASSAGE ERRORS AT INSTRUCTIONAL LEVEL IN ORAL READING. This is the total number of errors made in reading the passage at the child's Estimated Instructional Level in Oral Reading. A wide variety of error types are included in this score, such as: omission and misreading of words; deletion or addition of suffixes (e.g., "-ing" and "-ed"); and changes in verb tenses. Since the passages are designed to approximate about half a page in a standard basal reader, this score would approximate the number of errors one would expect the child to make while reading half a page of a reader at this level. A certain number of errors is to be expected, even from children who are above average readers. However, a high number of errors in oral reading will often interfere with comprehension and destroy the overall fluency of the oral rendition. Since the passages in Subtest III are of varying length, the number of errors that one would expect a child to make might vary depending on the number of words in the passage. Also, the *type* of error is a factor. For example, a child who makes 15 repetition or hesitation

errors is not reading as poorly as a child who misreads or omits 15 words. In general, however, a score of more than 15 may be considered a high number of Passage Errors, and indicates a problem in the child's oral reading. The child in Sample Protocol #8 made 30 errors in the 3-2 passage. Such a child should receive frequent practice in reading passages aloud that are at or below his Instructional Level (in this case, 3-1 and 3-2). The teacher should listen carefully to the child's reading and provide instruction to correct the specific types of errors that the child makes.

5. PHONIC WORD SCORE AT INSTRUCTIONAL LEVEL IN ORAL READING. This score shows the number of Phonic Target Words that the child correctly decoded in the Instructional Level passage. Since the six Phonic Target Words embedded in each passage (except Passage #1) are above the Reader Level of the passage, as well as less frequently presented in most basal readers, it is likely that a child who can decode these words is applying some knowledge of spelling-to-sound correspondence patterns while reading passages. A score of 4 or more may be considered a fairly good application of phonic skills during oral reading, while a score of less than 3 would imply a problem with applying these skills. The child in the Sample Protocol correctly read 5 of the 6 Phonic Target Words in the 3-2 passage, indicating that the application of phonic skills during oral reading is good.

Comprehension Scores. These two scores refer to the child's performance on the Comprehension Supplement. They should not be considered a complete means of diagnosing the child's comprehension ability, but merely an indication of the child's "simple recall" ability--that is, his/her ability to remember simple facts contained in a passage that was just read.

1. COMPREHENSION SCORE AT INSTRUCTIONAL LEVEL PASSAGE. This score shows how many of the five comprehension questions the child answered correctly following the reading of the Instructional Level passage. A score of 4 or 5 may be considered satisfactory; a score of 3 or less may indicate that the child is having difficulty understanding passages that he/she is able to decode. The child in Sample Protocol #8 correctly answered all five questions following the 3-2 passage, indicating no problem with "simple recall" comprehension.

2. COMPREHENSION SCORE AT ESTIMATED FRUSTRATION LEVEL. This score shows the number of questions that the child answered correctly following the reading of the Frustration Level passage. A score of 4 or 5 indicates that the child is able to understand passages which he/she has difficulty decoding. A score of 3 or less is to be expected, since the level of decoding ability is low on the Frustration Level passage. The child in the Sample Protocol correctly answered 3 of the 5 questions following the 4-2 passage.

SCORES RELATED TO PHONIC DECODING ABILITY

The scores in this category are derived from Subtest II. Together they constitute a means of diagnosing the child's ability to decode words that are examples of six of the most common spelling-to-sound correspondence patterns in the language (i.e., CVC, CCVCC, CVC$\not e$, CCVC$\not e$, CVVC, and CCVVCC). The items on the Real Word section of the subtest contain these patterns in both monosyllabic forms (Lists #1 through #6) and polysyllabic forms (Lists #7 through #12). The items on the Nonsense Word section are variations on the Real Words (see page 2) and contain the same patterns. Thus the nonsense words are designed to test "transfer ability"--that is, the ability to apply knowledge of the spelling-to-sound correspondence pattern contained in a word to the decoding of another (unknown) word that contains the same patterns. Transfer ability can be estimated by comparing the Real Word score on a particular pattern (e.g., CVC, CVC$\not e$, etc.) or form (i.e., monosyllabic or polysyllabic) with the corresponding Nonsense Word score. When the scores are close, this is an indication of good transfer ability. When the Real Word scores

are higher than the Nonsense Word scores, it indicates that the child is having difficulty applying knowledge of a particular pattern (or form) to the decoding of unknown words. It also suggests that the child is able to decode the Real Words, either partially or wholly, because they have been memorized.

Analyses conducted using a preliminary version of the DST indicate that, by the end of the Third Grade, good readers demonstrate a relatively complete knowledge of the six patterns covered by the subtest (scores of 50 to 60 correct on the Real Word section) and a good ability to apply the patterns (i.e., to transfer) in the decoding of unknown words (scores of 45 to 55 correct on the Nonsense Word section).

Phonic Decoding Summary Scores. These four scores show the total number correct on the 30 items on each of the four subdivisions of the Phonic Decoding Subtest. The items in each subdivision are representative of the six spelling-to-sound correspondence patterns covered by the subtest.

1. MONOSYLLABIC REAL WORDS. This is the total number correct of the 30 Monosyllabic Real Word items (e.g., *hit, shut, hide, brave, loud, threw*). A score of 25 or more demonstrates an ability to apply basic knowledge of letter sounds in decoding single-syllable words, while a score of 5 or less indicates little knowledge of spelling-to-sound correspondence patterns. The child in the Sample Protocol was correct on 26 of these items.

2. MONOSYLLABIC NONSENSE WORDS. This is the total number correct of the 30 Monosyllabic Nonsense Word items (e.g., *jit, thut, mide, clave, roud, prew*). A high score here indicates that the child has a complete understanding of the way letter sounds function in regularly spelled, single-syllable words, even when the words are unknown (as are nonsense words). This score should be compared with the score on Monosyllabic Real Words. If the Nonsense Word score is 10 or more points lower than the Real Word score, the child's transfer ability is poor: He/She is probably unable to decode unknown words on the basis of spelling-to-sound knowledge. The child in Sample Protocol #8 was correct on 20 Monosyllabic Nonsense Words, as compared to 26 correct on Monosyllabic Real Words. This shows that although there is some transfer ability, the child would probably benefit from additional phonics instruction.

3. POLYSYLLABIC REAL WORDS. This is the total number correct of the 30 Polysyllabic Real Word items (e.g., *visit, finish, beside, telephone, tower, flower*). High scores here indicate a good understanding of the syllabification of regularly spelled, polysyllabic words, while low scores indicate a poor understanding of how letter sounds function in words of more than one syllable. The child in the Sample Protocol was correct on 20 of these 30 items. This suggests that while there is some syllabification ability, the child is probably in need of further instruction in this area.

4. POLYSYLLABIC NONSENSE WORDS. This is the total number correct of the 30 Polysyllabic Nonsense Word items (e.g., *lisit, brinish, semide, delephote, zower, strower*). A high score here demonstrates that the child is able to decode almost any regularly spelled word, of any number of syllables, whether or not the child is familiar with the word. This score should be compared to the score on Polysyllabic Real Words in order to estimate transfer ability. If the score on Polysyllabic Nonsense Words is much lower than the score on Polysyllabic Real Words, the child is having difficulty applying knowledge of letter sounds in the decoding of unfamiliar words of more than one syllable. The child in the Sample Protocol was correct on only 6 of these 30 items, while he was correct on 20 of the Polysyllabic Real Word items. This suggests extremely poor transfer ability in the area of polysyllabics. This child would probably benefit from instruction in how letter sounds function in polysyllabic words.

Monosyllabic Real Words: Specific Scores. These six scores show the number correct on each of the six Monosyllabic Real Word lists. There are five items in each list, and each list represents one of the six spelling-to-sound correspondence patterns covered by the subtest. A score of zero on a particular list shows that the child has no knowledge of the pattern indicated when it occurs in monosyllabic words; a score of 3 or 4 indicates some knowledge of the pattern. A score of 5 suggests a complete knowledge of the pattern when it occurs in monosyllabic words, which may be confirmed by reference to the corresponding Monosyllabic Nonsense Word list.

1. CVC: Short vowel trigrams. (The items on this list are: *hit, fed, nut, jog,* and *lag.*) The child in the Sample Protocol was correct on all 5 items.

2. CCVCC: Short vowel words that contain consonant blends and/or consonant digraphs. (The items on this list are: *shut, path, stack, flesh,* and *prop.*) The child in the Sample Protocol was correct on all 5.

3. CVC*e*: Long vowel, silent *e* ending words which contain only single consonants (*hide, cute, doze, fake,* and *tone*). The child in the Sample Protocol was correct on 4 of these items.

4. CCVC*e*: Long vowel, silent *e* ending words which contain consonant blends and/or consonant digraphs (*brave, drove, flake, globe,* and *crime*). The child in the Sample Protocol was correct on all 5 items.

5. CVVC: Words which contain vowel digraphs and only single consonants (*loud, join, raw, loaf,* and *bail*). The child in the Sample Protocol was correct on 4 of these items.

6. CCVVCC: Words which contain vowel digraphs as well as consonant blends and/or digraphs (*threw, grain, choice, bound,* and *preach*). The child in the Sample Protocol was correct on 3 of these items and would probably benefit from some instruction in the spelling-to-sound correspondence of this pattern.

Monosyllabic Nonsense Words: Specific Scores. These six scores show the number correct on each of the six Monosyllabic Nonsense Word lists. There are five items in each list, and each list corresponds, in terms of the pattern represented, to a Monosyllabic Real Word list. These scores should be compared with the Monosyllabic Real Word scores. A score on a particular list that is 2 or 3 points lower than the score on the corresponding Monosyllabic Real Word list indicates that the child is having difficulty transferring knowledge of the pattern represented to the decoding of unknown words. A score of 5 on a particular list demonstrates a thorough ability to apply knowledge of the pattern in the decoding of any monosyllabic word that is representative of the pattern.

1. CVC. (The items on this list are: *jit, med, dut, nog,* and *pag.*) The child in Sample Protocol #8 was correct on all 5 of these items and can probably decode most short vowel trigrams.

2. CCVCC (*thut, sath, glick, blesh,* and *brop*). The child in the Sample Protocol was correct on 4 of these items, and can probably decode most words that contain this pattern as well.

3. CVC*e* (*mide, fute, voze, pake,* and *sone*). The child was correct on 3 of these items and probably needs some instruction in the long vowel, silent *e* ending pattern.

4. CCVC*e* (*clave, chove, grake, trobe,* and *drime*). The child was correct on 4 of these items.

5. CVVC (*roud, zoin, taw, woaf,* and *dail*). The child was correct on only 3 of these items and is probably having some difficulty with vowel digraphs.

6. CCVVCC (*prew, thrain, froice, spound,* and *fleach*). The score of 1 on this list confirms that the child is having difficulty with vowel digraphs, particularly when they occur in words which also contain consonant combinations.

Polysyllabic Real Words. These six scores show the number correct on each of the Polysyllabic Real Word lists. These lists test the same spelling patterns as do the Monosyllabic lists, but in polysyllabic form. A score of zero on a particular list shows that the child is probably not using spelling-to-sound correspondence information to decode polysyllabic words that contain the pattern represented. A score of 5 suggests that the child is completely facile with the pattern and can probably decode words, of any number of syllables, that contain that pattern. However, these scores should be compared with the scores on the corresponding Nonsense Word lists, in order to determine if the child is able to transfer knowledge of spelling-to-sound correspondence to the decoding of unknown words.

1. CVC. (The items on this list are: *visit, pencil, mitten, puppet,* and *combat.*) The child in the Sample Protocol was correct on 4 of these items.

2. CCVCC (*finish, pumpkin, publish, splendid,* and *stiffen*). The child in the Sample Protocol was correct on 3 of these items, and may be having difficulty with this pattern in polysyllabic forms.

3. CVC$\not e$ (*beside, mistake, confuse, rotate,* and *awoke*). The child was correct on 4 of these items.

4. CCVC$\not e$ (*telephone, grateful, provide, explode,* and *demonstrate*). The child was correct on 4 of these items.

5. CVVC (*tower, rooster, sausage, avoid,* and *announcer*). The child was correct on only 2 of these items, again suggesting that he needs help with vowel digraphs.

6. CCVVCC (*flower, complain, creature, embroider,* and *trouser*). The child was correct on 3 of these items.

Polysyllabic Nonsense Words. These six scores show the number correct on each of the Polysyllabic Nonsense Word lists. If the scores on these lists are much lower than the scores on the corresponding Polysyllabic Real Word lists, this indicates that the child's transfer skills are poor when applied to polysyllabic forms. A child with high scores on these lists can probably decode almost any phonetically regular word of any number of syllables.

1. CVC. (The items on this list are: *lisit, jencil, duppet, pitten,* and *wombat.*) The child was correct on 3 of these items, indicating some ability to decode unknown polysyllabic words which contain this pattern.

2. CCVCC (*brinish, thumpkin, sublish, glendid,* and *bliffen*). The child was correct on 3 of these items, again indicating some transfer ability with this pattern.

3. CVC$\not e$ (*semide, fistake, monfuse, motate,* and *aboke*). The child scored zero correct on this list, as well as on the three that follow. This shows that the child cannot apply his knowledge of CVC$\not e$ or CVVC patterns when he is attempting to decode unknown polysyllabic words.

4. CCVC$\not e$ (*delephote, clateful, drovide, excrode,* and *bemonthrate*).

5. CVVC (*zower, cooster, wausage, atoid,* and *azzounder*).

6. CCVVCC (*strower, lomprain, threature, enfroider,* and *clouser*).

DIAGNOSTIC-PRESCRIPTIVE INFORMATION CODES

The DST scores can be used to make certain inferences about a child's reading ability which are useful in planning instruction. These are referred to as "Diagnostic Information Codes" and they fall into three general categories: (a) Basal Vocabulary Level; (b) Specific Problem Areas; and (c) Phonic Decoding Development. For each code described below, a "Diagnosis" is provided which states the conclusions to be drawn from the test scores. Next, an "Indicator" states how the diagnosis is determined from the scores. Finally, the "Prescription" suggests instructional alternatives which may be used to correct the problem. These prescriptive suggestions can be adapted to most basal reading programs and do not require special techniques beyond those already familiar to most teachers and special educators.

The Diagnostic-Prescriptive Information Codes are entered at the very bottom of the cover page of the Test Protocol. The child in Sample Protocol #8 has several of these codes entered under the three categories mentioned above. As these codes come up in their descriptions below, the rationale for the particular code, as it applies to this child, will be given.

Basal Vocabulary Level. The child's vocabulary level can usually be determined on the basis of the Instructional Levels indicated by the test on both Basal Words in Isolation (Subtest I) and Basal Words in Oral Reading (Subtest III). Cases in which there is a wide discrepancy between the two Instructional Levels are covered under the "Specific Problem Area" codes.

Code 1. DIAGNOSIS: Complete non-reader.

INDICATOR: Instructional Level is below Preprimer (-PP).

PRESCRIPTION: Provide frequent, daily practice with all Preprimer vocabulary words that the child does not know. Proceed with introduction of new words carefully, making sure that the words are learned before new words are introduced. Use index cards with the words printed on them, games, teacher-made books, classroom displays, and any other device which will give the child the opportunity to practice current vocabulary. Prepare sentences (on cards, experience charts, etc.) which are composed exclusively of words which the child has learned. These techniques can be used whenever special vocabulary instruction is called for.

Code 2. DIAGNOSIS: Near non-reader.

INDICATOR: Instructional Level is Preprimer (PP).

PRESCRIPTION: Find out what vocabulary words the child knows. (This can be done by running the child through the vocabulary list in the back of the Preprimer you are using.) Provide frequent practice with new vocabulary words, using the techniques described for Code 1. Prepare sentences which emphasize new words and use other words in the sentences only if you are sure the child knows them.

Code 3. DIAGNOSIS: Severe reading deficiency.

INDICATOR: Instructional Level is more than two Reader Levels (i.e., more than a year) below that expected from the child's grade placement.

PRESCRIPTION: Run a vocabulary check: Have the child read through the word lists in the backs of the readers and note all the words that are missed. Begin to check vocabulary at the Reader Level that is just below the Instructional Level indicated. This is likely to be the appropriate Reader Level placement. However, the child's vocabulary may be incomplete even at this level. (For example, a Third Grader who scored an Instructional Level of 2-2 should probably begin with the vocabulary

from the First Reader.) Provide the child with frequent opportunities to practice the words that have been missed, using the techniques described for Code 1. Have the child practice oral reading at the appropriate Reader Level placement, and listen to the child read the same story a number of times before progressing to the next story. Always include comprehension questions in all reading lessons.

Code 4. DIAGNOSIS: Mild reading deficiency.

INDICATOR: Instructional Level is one or two Reader Levels below that expected from the child's grade placement.

PRESCRIPTION: The child's reader placement should be the one indicated as the appropriate Instructional Level. In addition, check the child's vocabulary at that Reader Level (as in the Code 3 Prescription). Provide the child with frequent opportunity for practicing all the words missed. Also have the child read each story aloud and silently at least twice before proceeding to the next story. Be sure to include comprehension exercises as part of each lesson.

The child in the Sample Protocol would receive a Code 4, since the Instructional Levels indicated for Basal Words in Isolation (3-1) and Basal Words in Oral Reading (3-2) are one and two Reader Levels below his grade level placement (Fourth Grade).

Code 5. DIAGNOSIS: On-grade-level reader.

INDICATOR: Instructional Level is the Reader Level that would be expected from the child's grade placement.

PRESCRIPTION: The child's reader placement should be at the level indicated as the appropriate Instructional Level. Continue normal instruction.

Code 6. DIAGNOSIS: Above-grade-level reader.

INDICATOR: Instructional Level is at least two Reader Levels (i.e., one year) above that which would be expected from the child's grade placement.

PRESCRIPTION: The child's reader placement should be at the level indicated as the appropriate Instructional Level. Encourage independent reading with library books, children's magazines, book reports, etc.

Specific Problem Areas. The DST also yields information about the child's reading skills that is independent of the actual Reading Level. A child may evidence specific problems in reading regardless of the level of vocabulary development. Most children with a severe deficiency in vocabulary development also have other problems which may call for special attention. However, children who are "on" or "above" grade-level readers may also display some of these problems. For example, a Third Grader whose vocabulary is on the Fifth Grade level may have certain difficulties reading Fifth Grade material, even though he/she can decode most of the words. If such a child can read Third (and perhaps Fourth) Grade material fluently, and with comprehension, this is probably not a problem, since the child's vocabulary level is far more extensive than what would be expected for his/her grade level. However, in most cases where such problems exist, they can be alleviated if particular attention is paid to the child's oral reading.

Code 7. DIAGNOSIS: Interference from context in oral reading.

INDICATOR: Instructional Level on Basal Words in Isolation is more than one Reader Level higher than Instructional Level on Basal Words in Oral Reading.

PRESCRIPTION: Provide frequent opportunity for reading material at In-

structional Level in Oral Reading. Give instruction in the use of context clues and application of phonics on words that are missed. Comprehension instruction is particularly important for children who are having this problem.

Code 8. DIAGNOSIS: Heavy reliance on context clues interfering with fluent oral reading.

INDICATOR: Instructional Level on Basal Words in Oral Reading is more than one Reader Level higher than Instructional Level on Basal Words in Isolation, coupled with a high incidence of Passage Errors (more than 15).

PRESCRIPTION: Provide frequent opportunity for oral reading in readers that are below the Instructional Level in Oral Reading. Pay special attention to the child's errors and give feedback, and pay special attention to the use of phonic skills during regular basal vocabulary instruction.

Code 9. DIAGNOSIS: Erratic vocabulary development.

INDICATOR: Large discrepancy (more than two Reader Levels) between Instructional and Frustration Levels on Basal Words in Isolation, Basal Words in Oral Reading, or both, when the Instructional Level shows that the child has a mild or severe reading deficiency.

PRESCRIPTION: The child should be placed in the reader indicated as the appropriate Instructional Level. Run a vocabulary check on the reader just above the child's placement. Provide special routines which give the child opportunities to practice any words that are missed. Plan to accelerate the child's progress in the basal reader as he/she masters these words above the current placement level.

The child in the Sample Protocol would receive this code since there is a gap of three Reader Levels between the Instructional Level on Basal Words in Isolation (3-1) and the Frustration Level (4-2).

Code 10. DIAGNOSIS: Extreme difficulty in oral reading.

INDICATOR: Inordinately high number of Passage Errors (more than 15) on Instructional Level passage.

PRESCRIPTION: Listen carefully to the child's oral reading during regular basal reader lessons and determine which types of errors the child makes most frequently. Provide special instruction to help the child avoid making these errors. For example, the child may need to slow down or relax more while reading, pay more attention to punctuation marks, or use some device (such as the index card) which will help direct attention to the words more effectively.

The child in Sample Protocol #8 would receive this code, since there were 30 Passage Errors on the Instructional Level passage.

Code 11. DIAGNOSIS: Poor phonic decoding ability in oral reading.

INDICATOR: Phonic word score at Instructional Level passage less than 4 out of 6 correct.

PRESCRIPTION: In some cases, the problem is simply that the child knows little or nothing about spelling-to-sound correspondence and thus cannot apply it when trying to sound out words (see Codes 12 and 13, below). However, in other cases, the problem is more one of *transference*: When confronted with words in sentences, the child is not applying phonic decoding skills that he/she actually has mastered. Make

a special point of showing the child how to use the phonic decoding process during oral reading instruction. Have the child sound out as many words as possible, and tell the child the sounds in the words which may be too difficult for him/her to sound out.

Phonic Decoding Development. Subtest II provides a fairly complete picture of the child's knowledge of common spelling-to-sound correspondence patterns, as well as his/her ability to apply this knowledge (i.e., transfer) in the decoding of phonetically regular words. Particular problems in the development of phonic decoding ability will show up in these scores. Certain problems are a direct function of level of development (i.e., the number of spelling patterns that a child has mastered). A First Grader would not be expected to be familiar with all of the most common patterns, or even be able to read polysyllabic words which contained the patterns; while a Fourth Grader should have mastered most, if not all, of the patterns, and be able to decode most phonetically regular polysyllabic words. Other problems are directly related to the transfer issue. However extensive a child's vocabulary may be, the child will not continue to develop in reading unless he/she can apply knowledge of spelling-to-sound correspondence patterns to the decoding of unknown words. Conversely, a child who can apply phonic-linguistic information contained in a limited vocabulary will continue to expand that vocabulary as more spelling patterns are introduced and mastered.

Code 12. DIAGNOSIS: No phonic decoding ability.

INDICATOR: All scores at or near zero.

PRESCRIPTION: Test knowledge of consonant sounds (e.g., *m, s, t, p*). Teach phonic sounds that the child does not know. Begin with CVC words that have *a* and *i* in the vowel position (e.g., m*a*n, t*i*p) and only consonants that the child knows or that you are teaching. Go on to other phonic sounds only when the child has mastered what has already been taught. Teach other spelling patterns (e.g., CVC*e*) only after the CVC pattern has been mastered.

Code 13. DIAGNOSIS: Limited phonic decoding ability.

INDICATOR: Phonic Decoding Summary Scores all between 3 and 10.

PRESCRIPTION: Test knowledge of consonant sounds and consonant blends and digraphs; provide practice as appropriate. Provide practice with all short vowel forms (i.e., CVC and CCVCC). When the child becomes comfortable with short vowel forms, begin practice with long vowel forms (i.e., CVC*e* and CCVC*e*). Have the child practice with nonsense words that illustrate the same patterns.

Code 14. DIAGNOSIS: Severely depressed transfer ability (monosyllabic forms).

INDICATOR: Difference between Summary Scores on Monosyllabic Real Words and Monosyllabic Nonsense Words greater than 7 points.

PRESCRIPTION: Provide practice with nonsense words that illustrate the patterns with which the child is familiar. For example, if the child can read real words that are short-vowel trigrams (CVC), teach the child to decode short-vowel trigram nonsense words.

Code 15. DIAGNOSIS: Mildly depressed transfer ability (monosyllabic forms).

INDICATOR: Difference between Summary Scores on Monosyllabic Real Words and Monosyllabic Nonsense Words from 4 to 7 points.

PRESCRIPTION: Same as for Code 14.

Code 16. DIAGNOSIS: Severely depressed syllabification ability.

INDICATOR: Difference between Summary Scores on Monosyllabic Real Words and Polysyllabic Real Words greater than 7 points.

PRESCRIPTION: Have the child practice with polysyllabic forms and demonstrate syllabification techniques. Emphasize how spelling-to-sound correspondence patterns apply in words of more than one syllable. Practice with polysyllabic nonsense words that illustrate the patterns being taught. Provide instruction in syllabification techniques during regular vocabulary instruction as well as during oral reading exercises.

Code 17. DIAGNOSIS: Mildly depressed syllabification ability.

INDICATOR: Difference between Summary Scores on Monosyllabic Real Words and Polysyllabic Real Words from 4 to 7 points.

PRESCRIPTION: Same as for Code 16.

The child in the Sample Protocol would receive this code, since there is a 6 point difference between his score on Monosyllabic Real Words and Polysyllabic Real Words.

Code 18. DIAGNOSIS: Depressed transfer ability (polysyllabic forms).

INDICATOR: Difference between Summary Scores on Polysyllabic Real Words and Polysyllabic Nonsense Words greater than 7 points.

PRESCRIPTION: Same as for Code 16. Place particular emphasis on applying phonic rules to Polysyllabic Nonsense Words.

Code 19. DIAGNOSIS: Decoding ability low for grade level.

INDICATOR: Summary Scores of less than 25 in any of the four categories (if the child is in the Third Grade or higher).

PRESCRIPTION: Provide instruction in any spelling patterns with which the child is having difficulty in both monosyllabic and polysyllabic forms. Emphasis on nonsense words will insure that the child grasps the principle of the spelling pattern.

The child in the Sample Protocol, a Fourth Grader, would receive this code. The relatively low scores on Polysyllabic Real Words and Monosyllabic Real Words, as well as the extremely low score on Polysyllabic Nonsense Words, indicate that this child's phonic decoding skills have not progressed as rapidly as they should.

Code 20. DIAGNOSIS: Weakness in specific pattern.

INDICATOR: A score of less than 3 on a particular list when the scores on the surrounding lists are 4 or 5.

PRESCRIPTION: Provide instruction in the specific pattern or patterns that are weak. Emphasize nonsense words that illustrate the pattern(s).

The child in Sample Protocol #8 would receive this code. The scores on Monosyllabic Nonsense Words in the CCVVCC pattern (1 correct) and on Polysyllabic Real Words in the CVVC pattern (2 correct) indicate that the child needs some instruction in these patterns. The scores suggest that the child is unfamiliar with the sounds of many vowel digraphs.

CHAPTER 8 USING THE DST FOR RESEARCH AND EVALUATION

The purpose of this chapter is to introduce the DST as an instrument for research and evaluation. In the first section of the chapter, a number of ways of scoring the DST are discussed in relation to the conceptual meaning of each type of score. Although several of these scores have already been discussed in this manual (see Chapters 6 and 7), they are reviewed again here to provide completeness and symmetry to our discussion of how the DST may be used for research purposes. In the second section, some preliminary evidence for the reliability and validity of the test are reviewed and an overview of the design of a larger reliability and validity study is presented. The final section of the chapter reviews some of the research and evaluation studies that are currently using the DST.

It should be emphasized from the outset that the scope of this chapter is at present very limited, for we are still in the process of refining the test materials and procedures. In the initial development of the DST, much time and energy was invested in extensive analysis of currently used program materials (see Chapter 1). Following this, the initial version of the test was used in a preliminary study and was revised on the basis of these results. This revised version was used in a second study, and minor changes were made which resulted in the version presented in this manual. The reliability and validity evidence presented here is based on the results of these two studies, each of which involved only 120 children. The larger reliability and validity study mentioned above, which is currently being undertaken, involves over 1,500 children.

DST SCORES AND THEIR MEANING

The DST scores may be divided into three major areas: basal vocabulary development, phonic skills development, and oral reading. Various aspects of word recognition ability are reflected in the basal vocabulary and phonic skills scores. These include: (a) total vocabulary development (as measured by the Raw Scores), and (b) specific characteristics of a child's decoding ability, such as levels of mastery, transfer ability, and response strength. The oral reading scores are designed primarily to reflect reading fluency.

Although several of the DST scores, such as the Raw Scores, are obvious and necessary, an enormous number of different indices may be developed to represent various aspects of decoding ability. During the course of our developmental project we are investigating several different possible techniques for scoring the test, and we are studying the validity of each of these techniques with successive data sets. A number of these scores may be computed by hand immediately following test administration, while others would be more time-consuming to derive by hand and may be handled by computer programs. Page 1 of the Test Protocol carries the information for Computer Card 1, including subject descriptors, several of the more easily computed Summary Scores, and results on the Subtest III Comprehension Supplement. (Appendix L shows how these codes may be entered.) In conducting research with the DST, an investigator may choose to store different information on Card 1, while continuing to use the format presented on the Test Protocol for encoding individual item information (i.e., Cards 2 through 13).

Some of the scoring techniques which have appeared most promising in our preliminary investigations are outlined below. Later versions of this manual will reflect the results of these investigations and a complete monograph describing our research will be developed.

Basal Vocabulary Development. Basal vocabulary development is represented by the 110 Subtest I items and by these same items included in the context of the Subtest III passages. The following scores can be derived from these subtests:

1. RAW SCORES. Obviously, the number of correct responses to the 110 Subtest I items and to these same items in Subtest III (Basal Target Words) represent two important Raw Scores which should reflect a child's total basal vocabulary development. These two Raw Scores may be converted to Grade Equivalent (G.E.) estimates by using Table 5, shown below.

Table 5

Conversion of Raw Scores (on Subtest I and Subtest III Basal Target Words) to Grade Equivalents

Raw Score	G.E.	Raw Score	G.E.	Raw Score	G.E.
0	1.0	49-50	3.0	89-90	5.0
1- 3	1.1	51-52	3.1	91-92	5.1
4- 6	1.2	53-54	3.2	93-94	5.2
7- 9	1.3	55-56	3.3	95-96	5.3
10-12	1.4	57-58	3.4	97-98	5.4
13-15	1.5	59-60	3.5	99-100	5.5
16-18	1.6	61-62	3.6	101-102	5.6
19-21	1.7	63-64	3.7	103-104	5.7
22-24	1.8	65-66	3.8	105-106	5.8
25-27	1.9	67-68	3.9	107-108	5.9
28-30	2.0	69-70	4.0	109-110	6.0
31-32	2.1	71-72	4.1		
33-34	2.2	73-74	4.2		
35-36	2.3	75-76	4.3		
37-38	2.4	77-78	4.4		
39-40	2.5	79-80	4.5		
41-42	2.6	81-82	4.6		
43-44	2.7	83-84	4.7		
45-46	2.8	85-86	4.8		
47-48	2.9	87-88	4.9		

The use of such a G.E. transformation allows the investigator to study the relationship between DST Raw Scores and other sources of information about a child's reading achievement, such as standardized test performance or program placement information.

2. CRITERION-REFERENCED SCORES. Since the successive lists of Subtest I are composed of items derived from the Reader Levels of existing instructional programs, a child's performance on a given list may be used to make criterion-referenced estimates of that child's ability to recognize words taught at that Reader Level. When a child is correct on all of the words in a given list, he would be classified as "master" of material at that level. Two specific criterion-referenced definitions have been developed to represent a child's Instructional Level (partial mastery) and Frustration Level (total non-mastery). These are described below in terms of Subtest I but may also be applied to Subtest III Basal Target Word performance.

a. *Instructional Level.* This is defined as the list beyond which the child scores less than 80% correct (identified as the Basal Level in the chapters on test scoring). Thus, if a child scores 90% correct on the 2-1 list, and 70% correct on the 2-2 list, that child's Instructional Level would be 2-1. Likewise, a child who scores 80% correct on the 4-2 list, and 50% correct on the 5-1 list, would have an Instructional Level of 4-2. Thus, the Instructional Level is intended to in-

dicate the level at which the child begins to miss some, but not most of the vocabulary words. It is the level at which instruction is recommended in order to insure complete mastery of the curriculum content.

b. *Frustration Level.* This is defined as the list on which the child misses more than 50% of the words (identified as the Ceiling Level in the chapters on test scoring). It is intended to indicate the level at which the child knows so little of the vocabulary that attempting to read material graded at this level will probably be an impossibly frustrating experience.

Obviously, the Frustration and Instructional levels may be defined in a variety of ways. We are investigating alternative definitions, and in the final version of this test manual we will use the definitions that appear to be the most valid.

3. SPREAD OF DEVELOPMENT. One way of characterizing a child's vocabulary development on the basis of DST performance involves the discrepancy between the child's Instructional and Frustration levels. A child who establishes an Instructional Level at the 2-1 Reader Level and a Frustration Level at the 2-2 Reader Level is clearly different from a child who establishes a 2-1 Instructional Level but a 5-1 Frustration Level. We have studied this "spread of development" information by translating the Reader Levels into G.E. scores (see Appendix L) and subtracting the Instructional Level (G.E.) from the Frustration Level (G.E.). Thus, the larger the value, the larger the discrepancy between the Instructional and Frustration levels. Although we are still in the process of studying this score, it would appear from preliminary analyses that, as one might expect, the larger spread of development is characteristic of the Fifth and Sixth Grade poor readers. These Spread of Development Scores can be computed from both Subtest I and Subtest III performance.

4. CONTEXT EFFECTS. Another interesting aspect to the DST is that the items tested in isolation on Subtest I are also tested in context on Subtest III. This permits an assessment of the effects of context on a child's word recognition ability. A simple technique for measuring this effect involves dividing the Raw Score on the Subtest III Basal Target Words by the sum of the Raw Scores on Subtest I and Subtest III Basal Target Words, resulting in a new score in the form of an index. A score of .50 represents little or no context effect, scores below .50 represent interference from context, and scores above .50 represent facilitation from context or the use of context clues in the recognition of basal vocabulary words. Procedures for deriving separate Context Interference and Context Facilitation indices using the parallel items feature of these two subtests (i.e., studying the probability that a Subtest III Target Word is correct, given that its corresponding Subtest I item was correct) are also under investigation.

5. OTHER MEASURES OF VOCABULARY DEVELOPMENT. A wide variety of other measures related to vocabulary development may also be derived from the DST permormance. For example, since correct responses are encoded on the basis of response latency estimates (i.e., those occurring in less than 2 sec.; in more than 2 sec. but less than 5 sec; and those requiring more than 5 sec.), it is possible to study the differences between groups (e.g., good and poor readers; boys and girls) in terms of response latencies. Techniques for equating groups on the basis of the Instructional and Frustration levels and for comparing groups on the basis of response latencies are being studied. The codes for incorrect responses may be used to study tendencies in various groups toward various types of errors. It may be asked, for example, whether good and poor readers differ in their tendency to make vowel errors or consonant errors. Techniques for analyzing the DST data which will permit the fair assessment of such hypotheses are being developed. For example, the total number of errors of a specific type might be divided by the total number of er-

rors of commission to generate an index of a child's tendency to make errors of that type.

Phonic Skills Development. Since Subtest II, the Phonic Decoding Subtest, is based on a multidimensional design (e.g., real vs. nonsense words; monosyllabic vs. polysyllabic words), a number of interesting techniques for studying phonic skills development are possible:

1. RAW SCORES. Each of the two sections of Subtest II, Real Words and Nonsense Words, includes a total of 60 items, and the Raw Scores on each of these sections may be computed independently. Furthermore, scores on the 60 Monosyllabic items may be computed separately from the 60 Polysyllabic items. The 60 items involving single consonants may be scored separately from the 60 items involving consonant blends and digraphs. And, finally, the 40 items based on the short vowel spelling pattern may be scored separately from the 40 long vowel and 40 vowel digraph items. Independent computations of such scores permit the assessment of a variety of hypotheses concerning the development of phonic skills. For example: Do poor readers differ more markedly from good readers on one particular dimension of Subtest II than on another?

2. PHONIC TRANSFER. One of the important questions in reading research involves the degree to which children are able to apply knowledge of spelling-to-sound correspondence to the decoding of unknown words--i.e., transfer ability. Transfer may be measured on the DST by comparing performance on the Real Word and Nonsense Word sections of the subtest. The parallel items feature of these two test sections (each Nonsense Word item has been formed by changing consonants and consonant clusters of the Real Word items) makes the subtest particularly suitable for measuring transfer. A Phonic Transfer Index (PTI) may be defined as the number of cases in which both the Real Word and its corresponding Nonsense Word are correct, divided by the total number of correct Real Word responses. Other procedures for measuring transfer, which do not consider the parallel item feature of the subtest but involve only the total number correct on the Real and Nonsense Word sections, are also being investigated.

3. OTHER MEASURES OF PHONIC SKILLS. Since responses on the Phonic Decoding Subtest are classified using the same procedures as in Subtest I, all of the additional measures which are discussed above for basal vocabulary development apply as well to phonic skills development.

Measures of Oral Reading. Apart from the scoring of specific Target Word items (drawn from Subtests I and II) in the Subtest III passages, 10 different types of oral reading errors (see Appendix E), as well as the time required to read the passage, are recorded while the child is reading each passage. These measures may be used to study various aspects of the child's oral reading ability:

1. PASSAGE ERROR RATES. The total number of errors made by a child in reading a given passage constitutes one measure of the child's oral reading fluency. In order to compare children's reading of passages of differing lengths, the number of errors made on a passage may be translated into Error Rate by dividing the number of errors by the total number of words in the passage and multiplying by 100. Thus Error Rate, on the DST, is the number of Passage Errors per 100 words. However, in order to make comparisons between children of differing ability levels (e.g., good and poor readers), a further manipulation is necessary. Questions concerning a child's oral fluency are more interesting if they are asked with respect to a given level of difficulty (relative to the child's overall ability) rather than an absolute level of difficulty. For example, on a particular passage at the Third Grade level of difficulty, it is a foregone conclusion that a Third Grade poor reader will make more errors than a Third Grade good reader. The more interesting question is: At or near their respective

limits of development, do good readers make fewer errors in oral reading than do poor readers? Such a question might be addressed to the DST data by studying the Error Rates of children at a specified level of development, such as the Instructional Level described above. Thus, we might be comparing the Error Rate of the Third Grade poor reader on the 2-1 passage with that of the Third Grade good reader on the 4-1 passage. Such a manipulation would, at least to some extent, hold ability level constant across good and poor reader groups.

2. PASSAGE ERROR TENDENCIES. Another dimension of oral reading fluency may be studied by computing an index of Passage Error Tendency for each of the 10 types of Passage Errors recorded. The number of errors of a given type made on a specific passage divided by the total number of Passage Errors made on that passage provides an index of a child's tendency to make that type of error, which is independent of the total number of errors made on the passage (i.e., an index of Passage Error Tendency). Finally, by tying such an analysis to a specific ability level, such as the Instructional Level passage, we can compare groups on their tendency to make specific types of errors (e.g., Do poor readers tend to make more or fewer Meaning Substitutions than do good readers? Do Third Graders tend to make more or fewer Repetition Errors than do First Graders?). This feature of the DST scoring procedure will permit the testing of a wide range of hypotheses concerning the development of decoding skills in reading.

3. READING RATE. Finally, an Oral Reading Rate may be computed by dividing the total number of words in a given passage by the time (in minutes) a child takes to read that passage; thus, the Reading Rate is the number of words read per minute. These measures can also be studied across groups by equating for ability level.

In this section, we have reviewed techniques for creating approximately 50 different scores from the DST. Since most of these may be varied according to definitions involving ability level, the test provides a potentially huge number of different test scores. We are in the process of narrowing down these possibilities to the most valid and useful. However, it should be noted that the test itself is an extremely flexible instrument and may be useful in developing other scores to test a variety of hypotheses not originally envisioned by our project.

RELIABILITY AND VALIDITY

At the time of the writing of this "interim" manual, the DST project is approximately 1½ years old. Thus far, analyses have been completed on two limited data sets (which include 120 children in each set). However, during the course of the project we have collected data on more than 1,500 children for our main reliability and validity analyses. In this section of the manual, we will briefly describe the results of reliability and validity analyses performed on these two limited data sets, and then we will describe our plans for examining the reliability and validity of the DST using the much larger data sets.

First Field Study. The first field study was conducted using a preliminary version of the DST, which was subsequently revised on the basis of resultant data. Although a number of changes were made in the item sequencing, and in the selection of items on the Phonic Decoding Subtest, the preliminary version was identical in format, and similar in most other respects, to the version described in this manual.

The 60 good and 60 poor readers who participated in the first field study attended a single urban school, and came primarily from families whose incomes fell below federal poverty level guidelines. The children were selected from the lowest and highest quartiles of reading ability (based on standardized test performance) in each of the six primary grades (10 good and 10 poor readers per grade).

In order to assess inter-tester reliability, tester-pairs filled out matched

protocols during 14 of the initial test sessions. The percentages of agreement on the coded response classifications (including latency estimates and incorrect response classifications) and on the simple classification of responses as correct and incorrect were computed for each list, subsection, or passage. The percentages of agreement on the specific Response Codes range from 72% to 100%, with most above 85%. Inter-tester agreement on the Right/Wrong classification (in which responses were considered independently of specific Response Codes), which has formed the basis for most of our analyses of these data, was higher (ranging from 84% to 100%, with most above 90%) than the specific Response Code agreement.

Regarding internal consistency, the alpha coefficients generated on every item in the DST were all extremely high, ranging from .95 to .99. Although the issue of the test's reliability requires further investigation, it would seem from these preliminary analyses that it is an extremely reliable instrument.

Estimates of the concurrent and convergent validity of the DST were made by computing correlations between the various DST scores and the academic measures available on the subject sample. All of these measures, which formed the basis for the validity analysis, were available in the school's records. However, not all measures were available on the children at all grade levels. For example, New York City-Wide scores were available only for Third- through Sixth-Grade children. Table 6 shows the correlations of the Raw Scores on the Basal Word Recognition Subtest (BWR) and the Real Word (PDRW) and Nonsense Word (PDNW) sections of the Phonic Decoding Subtest with these measures.

Table 6

Correlations of DST Scores with Measures of Academic Achievement (First Field Study)

Measure	N	BWR	PDRW	PDNW
Iowa Test of Basic Skills (ITBS):				
Vocabulary	59	.86*	.85*	.85*
Reading	59	.78*	.75*	.79*
Spelling	59	.69*	.67*	.63*
Math	57	.67*	.67*	.61*
New York City-Wide Reading Test (NYC):				
Vocabulary	77	.78*	.70*	.71*
Comprehension	77	.73*	.62*	.66*
Total Reading	77	.76*	.66*	.69*
Gilmore Oral Reading Test:				
Accuracy	59	.78*	.68*	.71*
Comprehension	59	.53*	.44*	.38*
Program Placement†:				
Basal Reader	60	.92*	.89*	.83*
Phonics	60	.94*	.92*	.86*

* $p<.001$

† Placement of children in reading programs used in classroom. Supplied by teachers of First- through Third-Grade children.

Key: BWR: Basal Word Recognition--Raw Score
PDRW: Phonic Decoding/Real Words--Raw Score
PDNW: Phonic Decoding/Nonsense Words--Raw Score

Reference to the table reveals that all coefficients were high (and all were significant, $p<.001$). Particularly interesting is the pattern of these relationships. For example, the correlations with ITBS Reading (a comprehension measure) were lower than the corresponding correlations with ITBS Vocabulary (a word recognition measure). This same pattern may be observed in the correlations with the NYC scores, as well as with the Gilmore Oral scores. Moreover, the correlations with the two ITBS reading measures (Reading and Vocabulary) were both higher than those with the non-reading measures (Spelling and Math). This finding suggests a high degree of convergent validity.

One additional observation should be made concerning these data. The correlations between the DST scores and the Program Placement information supplied by the teachers were higher than those between the DST scores and any other measure. This result tends to support the criterion-referenced nature of the DST. That is, the more direct measure of a child's actual classroom performance tends to correlate better with the criterion-referenced DST scores than do the more general, standardized test scores.

Second Field Study. The second field study was also conducted with a sample of 120 good and poor readers. In this study, however, 15 good and 15 poor readers were selected from four grade levels (Two through Five) in several schools. The schools were located in one school district which, although it was urban, was economically middle-income. The children were selected on the basis of their scores on the Gates-MacGinitie Reading Test (administered by the DST project staff) and were screened for IQs within the normal range on a short form (four subtests) of the Wechsler Intelligence Scale for Children (WISC). The children in the poor reader sample had achieved scores on the Gates that were from one to two years below grade level, while the good readers scored approximately one year above grade level.

Estimates of the concurrent and convergent validity of the DST were made by computing partial correlation coefficients between the various DST scores and the Gates Vocabulary subtest (a word recognition measure) as well as the Gates Comprehension subtest. These are shown in Table 7. IQ was partialed since its effect, if any, would not be uniform across all subjects due to a small but significant difference in the IQ scores of the good and poor reader groups.

Table 7

Zero Order and Partial[1] Correlations of DST Scores with Gates-MacGinitie Subtests [N=120][2] (Second Field Study)

	Gates Vocabulary		Gates Comprehension	
Score	Zero Order	Partials	Zero Order	Partials
BWR	.83*	.79*	.78*	.74*
PDRW	.76*	.71*	.72*	.67*
PDNW	.78*	.74*	.77*	.72*
BTW	.83*	.80*	.79*	.75*
PTW	.80*	.76*	.76*	.72*
PTI[2]	.52*	.49*	.51*	.48*

* $p<.001$

[1] Controlled for IQ

[2] For Phonic Transfer Indices, N=52

Key:
BWR: Basal Word Recognition--Raw Score
PDRW: Phonic Decoding/Real Words--Raw Score
PDNW: Phonic Decoding/Nonsense Words--Raw Score
BTW: Basal Target Words (Subtest III)--Raw Score
PTW: Phonic Target Words (Subtest III)--Raw Score
PTI: Phonic Transfer Index

Reference to Table 7 shows that the correlations (both zero order and partial) between the DST Raw Scores and both subtests of the Gates were all quite high and significant ($p<.001$). Moreover, the correlations with the Gates Vocabulary were all slightly but consistently higher than the correlations with the Gates Comprehension, suggesting convergent validity. Correlations between the previously described Phonic Transfer Index (PTI) and the Gates subtests were also quite substantial and significant ($p<.001$). In total, the picture presented here suggests a high degree of concurrent validity and a good indication of convergent validity.

Main Reliability and Validity Analysis. During the current project year two large data sets have been collected which will be used to establish the reliability and validity of the DST. The first data set involves approximately 300 children (the entire population, Grades One through Six, of a single elementary school) who were given the DST in October 1978 and again in March 1979. The second large data set includes approximately 1,300 children who were given the DST in May 1979. (This administration involved a modified "fast" form of the test which is not described in this manual.) We are currently in the process of conducting an extensive reliability and validity analysis of these data.

Item analyses will involve the measurement of item difficulty levels and item discrimination indexes (Guilford, 1965). The aim is to validate the item sequence. Rasch's two-parameter model will be applied to all data sets. Results of this analysis will be reported for item difficulty by relating the ability scale (latent trait, defined by the score on the subtest to which the given item belongs) to the probability of a correct response; and for the item discrimination index, the reciprocal of the standard deviation of the ogive will be reported (Baker, 1977).

In order to assess the degree of reliability between subtests in designating children as masters or non-masters of a given Reader Level (Subtest I and III) or spelling pattern (Subtest II and III), the cross-tabulation of the words in isolation with words in context will be used. For each subtest, a correct or incorrect response is recorded, producing a 2 x 2 table. The percentage of consistent decisions is a good index of reliability (Thorndike & Hagin, 1977). This is particularly true of measures such as the DST where subjects can obtain perfect scores on the test. Children on the threshold of mastery are likely to produce reversals between subtests on the parallel items (i.e., words in context versus words in isolation). On the other hand, reversals should be infrequent among children who have thoroughly learned the skill or those who have never learned it at all.

The concept of consistency can also be applied to inter-item comparisons within lists and across lists. In this case, the consistency means should be higher for adjacent items within a list (e.g., Item #1 versus Item #2, List #1) than for items across lists (e.g., Item #1, List #1, versus Item #1, List #2). This procedure will provide information on the homogeneity within a list (the degree to which items are of comparable difficulty) and on the degree to which items on one list are different from those on adjacent lists.

Analyses based on more conventional approaches to the assessment of reliability will also be included. For example, the pretest/post-test design permits estimates of test reliability through test/retest correlation coefficients. This index will provide further information about the test's stability, which is only partly dependent on the correlations among items within a test.

Validity. Convergent and discriminant validity of the DST will be assessed through the multitrait-multimethod matrix (Campbell & Fiske, 1959). Three traits and four methods will be assessed. The three traits are represented by the three DST subtests: Basal Word Recognition, Phonic Decoding, and Oral Reading. The four methods that measure these traits are the DST, test results from two standardized achievement tests, and monthly reading program placement information gathered from teachers.

Table 8

Multitrait-Multimethod Matrix

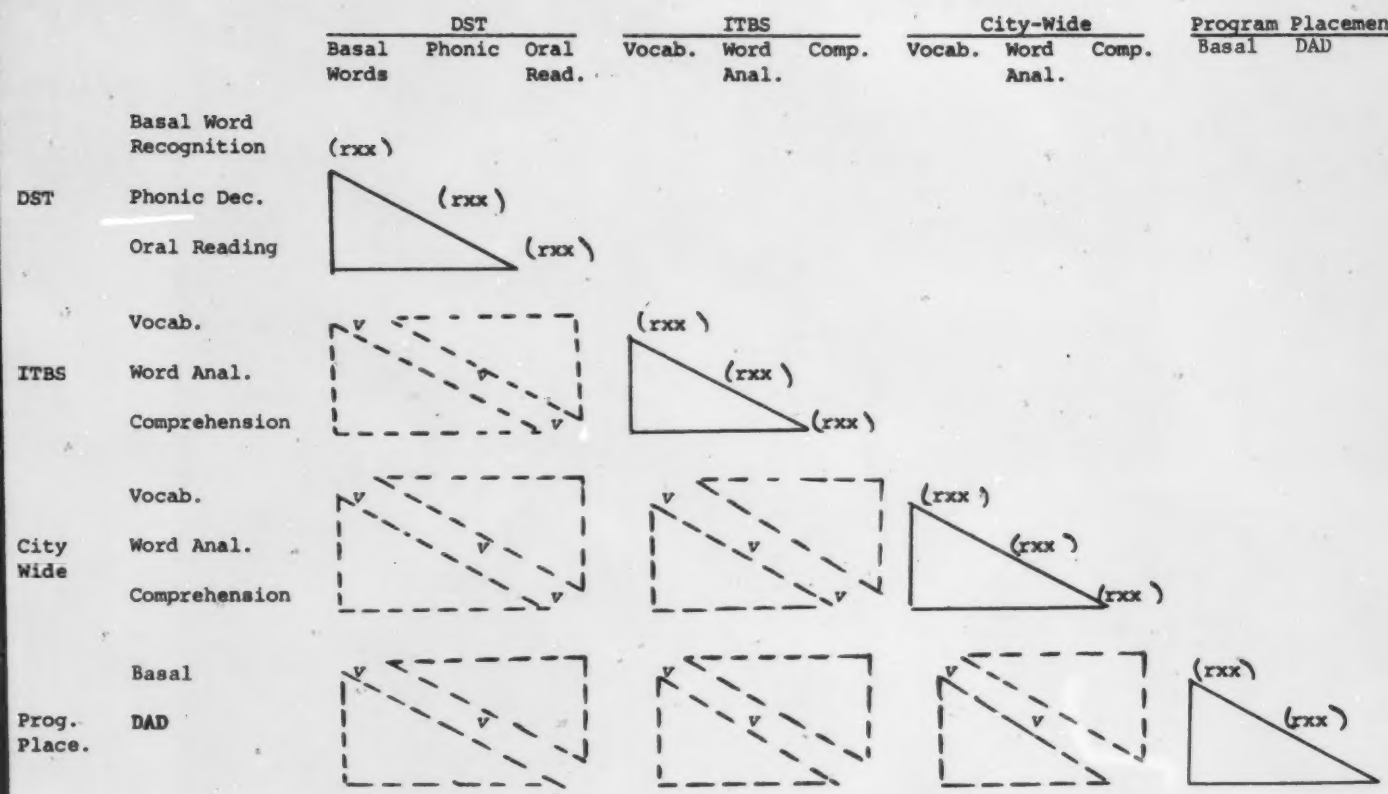


Table 8 illustrates how the multitrait-multimethod matrix is set up. This procedure will be performed using data from children in Grades One through Six, both combined and separately. Four indices will be examined which will assess test validity. First, the degree to which the validity coefficients are significantly different from zero provides evidence for convergent validity. (The validity coefficients are represented by the v's in the table.) Second, the validity coefficients should be higher than the correlation obtained between that variable and any other variable having neither trait nor method in common. (This entails comparing the validity coefficient to the correlations lying in its column and row within the heterotrait-heteromethod triangles. These triangles are enclosed by broken lines.) Third, a variable should correlate higher with an independent effort to measure the same trait than with those that measure different traits but employ the same method. (This entails comparing the validity coefficients with their corresponding values in the heterotrait-monomethod triangles. These triangles are enclosed by solid lines.) Fourth, patterns of trait interrelationships in all the heterotrait triangles of both the monomethod and heteromethod blocks should be similar. These last three criteria will provide evidence for the test's discriminant validity. Thus, criterion and construct validity are established by a convergence of independent approaches or methods. Discriminant validity will be obtained if the DST subtests do not correlate highly with other subtests from which they were intended to differ. In addition, this procedure will permit an assessment of the amount of systematic variance among test scores due to trait content and the amount due to measurement features.

CURRENT USES OF THE DST FOR RESEARCH AND EVALUATION

The original contract with NICHD was made to "develop a test of decoding skills for use in research on developmental dyslexia." To this end, we have conducted several small studies and encouraged other projects to use the instrument for both research and evaluation. In this section, we will describe some of these applications of the DST.

Research on Reading Problems. The DST project staff has conducted two studies designed to compare the decoding skills of good and poor readers, and a third is currently in the planning stage. Earlier in this chapter we described the samples selected for the first two studies. The first study, conducted with the developmental version of the test, employed selection criteria based on available school records and no effort was made to measure or control IQ. The results of that study, which were reported at a recent International Reading Association convention (see Reference Note 1, p. 72), showed that all raw score measures significantly ($p<.001$) discriminated between the good and poor readers. We found that while the good readers tended to approach the ceiling on all measures by the Third Grade, the poor readers were still well below the ceilings in the Sixth Grade. Moreover, it was noted that the Sixth Grade poor readers' scores resembled the Second Grade good readers' scores in all respects but one--the Nonsense Word section of the Phonic Decoding Subtest. On this measure the Sixth Grade poor readers were still below that of the Second Grade good readers. Analysis of the Phonic Transfer Index (PTI) indicated that good readers approached a maximum of about .8 to .9 in the Second Grade while poor readers appeared to be approaching a maximum of about .5 in the Fifth and Sixth Grades. It was suggested that, beyond the expected lag in the development of decoding skills in poor readers, the most characteristic feature of a poor reader may be a failure to understand and apply the spelling-to-sound correspondence system.

In the second field study, which employed the version of the test described in this manual, we employed our own selection instrument (the Gates-MacGinitie Reading Test) and controlled for IQ by accepting only children who scored within the normal range on a short form of the Wechsler Intelligence Scale for Children (WISC) and on the Peabody Picture Vocabulary Test. Although we are still in the process of analyzing this second data set, results on our Raw Scores analysis have tended to confirm our previous findings with the developmental version. In this analysis, although the Phonic Transfer Index significantly discriminated between good and poor reader groups, the poor reader group displayed a slightly greater capacity for increased phonic transfer performance (to a PTI of .63) in

the Fifth Grade. Since the second field study contained no Sixth Grade sample, it is impossible to tell whether the leveling off effect that occurred on the PTI in the first field study would have occurred here. Thus, further research will be helpful in confirming or rejecting the hypothesis that the most characteristic difference between good and poor readers lies in the inability of the poor readers to fully grasp the system of spelling-to-sound correspondence. We are currently developing Analysis of Covariance techniques for analyzing the various indices yielded by the DST which will control for the magnitude of the denominator in each index, thereby providing a more equitable method of comparing good and poor readers on these measures. Preliminary analyses of these data have been reported in our Project Reports (see Reference Note 2, p. 72) and we expect to have completed this effort by September 1979.

Our third experiment to study decoding skills problems in poor readers will employ a suburban sample. The poor readers have already been identified by the local school district as "learning disabled" on the basis of the WISC-R, full-scale IQ, and the California Achievement Test. The comparison sample we select for this study will be children who are within the normal range of reading ability (one-half year below to one-half year above grade level) on the CAT, rather than the "good reader" samples of our previous studies who tended to score one to two years above grade level on standardized tests. This study is scheduled for the Fall of 1979.

Evaluation, Program Monitoring, and Diagnostic Feedback. A number of independent projects have already adopted the DST as a multipurpose evaluation device. These include two reading disabilities clinics, a hospital-based project for delinquent boys, and two Follow Through projects (both sponsored by the Interdependent Learning Model at Fordham University). The clinics are using the DST as a part of their general evaluation program to demonstrate program effects (together with a variety of other reading achievement tests), for making initial program placement decisions, and for periodic progress monitoring. Our collaboration with these clinics has permitted us to make informal comparisons of the DST scores with scores on other measures of reading achievement and to evaluate the DST as an indicator of program progress. We have observed a remarkable correspondence between the DST Instructional Level and other individual achievement test results (e.g., the Peabody Individual Achievement Test). Another interesting result of the clinic application has been that, although the clinic places their reading-disabled children about one-half year below that indicated by the DST, progress in the clinic's program is accurately reflected in successive DST scores.

The Follow Through projects have used the DST primarily as a diagnostic-prescriptive feedback instrument. One of these projects administered the test in the Fall of 1978 to children who had evidenced severe problems on the Spring 1978 standardized test administered by that project. Teachers were provided with diagnostic-prescriptive feedback and asked to adjust instruction to this information. Four months later these children were retested and progress was computed for individual children. It was found that about half of these children had made significant progress (one-half year or more) while the remaining half had made little or no progress. Special programs were than developed for the children who had made little or no progress. Both projects administered the DST to all children in their programs (First through Third Grade) near the end of the current (1978-79) school year and are planning to use these results to assist teachers in program placement and program development at the beginning of the coming school year (Fall 1979). In all cases where diagnostic feedback has been provided, the teachers were surveyed for their responses to this information. These evaluations provided reassuring results. Teachers indicated that they generally agreed with the information provided, had used it to help their children, would like to continue to receive DST information, and felt that it was generally superior to other sources of diagnostic-prescriptive feedback they had received in the past.

Conclusions. At present, it would seem that the DST is an extremely flexible research tool with the potential to address a variety of questions related to the development of decoding skills in reading-disabled children as well as a wide variety of other groups. It also seems to have valuable application as a diagnostic-prescriptive and program evaluation device. The key to its particular value at this

time is in its criterion-referenced base. From the DST scores, one is able to make inferences concerning a child's ability to handle reading materials at a given program level. This is in contrast to most currently available reading tests, which are norm-referenced and therefore permit only inferences concerning how a child's performance compares with other children in the norm samples used.

As previously noted, we are in the process of producing a test monograph with complete information concerning all aspects of the test's reliability and validity. When this document is available, it will provide research and evaluation projects with all information necessary to use DST for the entire range of purposes outlined in this chapter.

Appendix A

VERBAL INSTRUCTIONS TO CHILD

SUBTEST I

The Subtest I notebook is placed in front of the child so that the divider page is covering the first item in List #1. The Tester says:

I am going to show you some words that I want you to read. As soon as I turn the page, tell me what the word is. Some of the words may be hard and you may not know them. Just do the best you can. It is okay to guess.

If a prompt is required (see page 8), the Tester says:

What do you think it is? Do you want to make a guess?

SUBTEST II: REAL WORD SECTION

The Subtest II notebook is placed in front of the child so that the divider page is covering the first item in the Real Word section. The Tester says:

Now I am going to show you some words that you may be able to read by paying attention to the sounds of the letters in the words. Some of the words you may not know right away. When you see a word you don't know, try sounding it out. Don't worry if you don't know a word. Try it anyway.

If a prompt is required, the Tester says:

Try sounding it out.

SUBTEST II: NONSENSE WORD SECTION

The Subtest II notebook should be turned around and placed in front of the child so that the divider page is covering the first item in the Nonsense Word section. The Tester says:

Now I am going to show you some "funny-looking" words. They look like real words and they sound like real words, but they are not real words because they don't mean anything. They are nonsense words. But you can read them by sounding them out as if they <u>were</u> real words. Here is the first one. See if you can say it.

If the child starts off by giving a real word that looks something like the nonsense word, the Tester says:

That's a <u>real</u> word that looks (or sounds) something like this. But this is a <u>nonsense</u> word. Look at it carefully. Can you tell me what the <u>nonsense</u> word is?

If a prompt is necessary, the Tester says:

Try sounding it out.

SUBTEST III

The Tester finds the starting passage and places it in front of the child with a blank piece of paper covering any other exposed passage. If the starting passage is above Passage #1, the Tester says:

Now I am going to show you some little stories that I want you to read out loud. Read them as carefully as you can and don't rush. After you finish each story, I will ask you a few questions about it, so pay attention.

If the starting passage is Passage #1, the Tester deletes reference to the comprehension questions. If the child is then to go on to Passage #2, the Tester says:

From now on, after you finish a story, I will ask you some questions about the story, so pay attention.

It is permissable to prompt on the Target Words only. If a prompt is necessary on a Basal Target Word, the Tester says:

Do you want to try it? or *See if you can guess it.*

If a prompt is necessary on a Phonic Target Word, the Tester says:

Try sounding it out.

Appendix B

RESPONSE CODES

Definition		Code
Correct:	Immediate response (in 2 seconds or less).	1
Correct:	Response with some difficulty (in more than 2 seconds but less than 5) For example: a slight hesitation, a "stumbling" response, an immediate self-correction.	2
Correct:	Response with extreme difficulty (in more than 5 seconds).	3*
Incorrect:	No response. For example: Child says, "I don't know."	4
Incorrect:	Response contains vowel error--one or more vowel sounds incorrect, but consonant sounds correct.	5
Incorrect:	Response contains consonant error--one or more consonant sounds incorrect, but vowel sounds correct.	6
Incorrect:	Response contains errors on both vowels and consonants.	7
Correct:	Response is "assumed" correct. Assumed correct items are those below the Basal Levels on Subtests I and III.	8**
Incorrect:	Response is "assumed" incorrect. Assumed incorrect items are those above the Ceiling Levels on Subtests I, II, and III.	9

*Code 3 is not used in Subtest III, since the correct Target Word response would be provided by the Tester if the child did not give it within 5 seconds.

**Code 8 is not used on Subtest II since there is no Basal Level on this subtest.

Appendix C

KEY TO PHONETIC ENCODING (Vowel Sounds)

Use the symbol:	For the letters:	If the sound is the same as in the word:	Example:
a	a	mat	mat
ā	a	tape	tāp *
ā	ai	bail	bāl
ā (ay)	ay	bay	bā (bay)
ā	ey	they	thā
ā	ei	vein	vān
e	e	met	met
e	ea	dead	ded
ē	e	theme	thēm
ē	ee	seem	sēm
ē	e	be	bē
ē	ea	beat	bēt
ē	ie	field	fēld
ē	ey	key	kē
ē	y	baby	bābē
i	i	sit	sit
ī	i	kite	kīt
ī	i	high	hī
ī	ie	die	dī
ī	y	by	bī
o	o	lot	lot
o	a	father	fother
ō	o	rope	rōp
ō	o	go	gō
ō	oa	boat	bōt
ō	ow	low	lō
u	u	nut	nut
u	o	some	sum
u	ou	tough	tuf
ū	u	cute	kūt (cūt)
ū	u	unite	ūnīt
ū	eu	feud	fūd
ô (or)	o (or)	horn	hôrn (horn)
ô	aw	law	lô
ô	ou	bought	bôt
ô	au	haul	hôl
ô	a	hall	hôl
ô	oo	door	dôr
ô	ou	four	fôr

Use the symbol:	For the letters:	If the sound is the same as in the word:	Example:
â	ai	air	âr
â	a	bare	bâr
â	e	there	thâr
â	ea	wear	wâr
ä	a	are	är
oo	oo	look	look
oo	u	put	poot
oo	u	sure	shoor
oo	ou	would	wood
o͞o	oo	boot	bo͞ot
o͞o	u	rule	ro͞ol
o͞o	ui	fruit	fro͞ot
o͞o (ew)	ew	flew	flo͞o (flew)
o͞o (ew)	ue	blue	blo͞o (blew)
o͞o	ou	through	thro͞o
o͞o	o	do	do͞o
oi	oi	boil	boil
oi (oy)	oy	boy	boi (boy)
ou	ou	loud	loud
ou (ow)	ow	now	nou (now)
er	ur	fur	fer
er	ir	fir	fer
er	or	word	werd
er	ear	earth	erth
er	er	deter	deter

(Schwa Sounds) **

∂ (a)	a	ago	∂gō (agō)
∂ (e)	e	mitten	mit∂n (miten)
∂ (i)	i	sanity	san∂tē (sanitē)
∂ (o)	o	comply	c∂mpli (compli)

Notes:

* Silent letters (e.g. ∅) are not encoded.

**Although the schwa sound exists in spe ch, it is not necessary to encode it. The actual vowel (i.e. a, e, i, or o) may be encoded instead.

(continued)

Appendix C (continued)

KEY TO PHONETIC ENCODING (Consonant Sounds)

Use the symbol:	For the letters:	If the sound is the same as in the word:	Example:
b	b (bb)	baby	bābē
ch	ch	chin	chin
ch	tch	latch	lach
ch	t	creature	Krēcher
d	d (dd)	daddy	dadē
f	f (ff)	fake	fāk
f	ph	photo	fōtō
f	gh	tough	tuf
g	g (gg)	get	get
h	h	he	hē
h	wh	who	hōō
j	j	joke	jōk
j	ge	siege	sēj
j	dge	ledge	lej
k	k	kit	kit
k (c)	c	cone	kōn (cōn)
k	ck	pick	pik
k	ch	chord	kord
ks	x	ax	aks
kw	qu	quit	kwit
l	l (ll)	tell	tel
m	m (mm)	mommy	momē
n	n (nn)	not	not
n	kn	know	nō
p	p (pp)	pet	pet
r	r (rr)	ran	ran
s	s (ss)	sit	sit
s	c	pencil	pensil
s	sc	science	sīens (sīns)
sk	sc	scold	skōld
sk	sch	school	skōōl
sh	sch	schwa	shwo
sh	s	sure	shoor
sh	sh	cash	kash
t	t(tt)	tatter	tater
th	th	them	them
th	th	thin	thin
v	v	vast	vast
w	w	wait	wāt
w	wh	what	wat (wŭt)
wu	o	one	wun
y	y	yet	yet
z	z	zebra	zēbra (zēbrŭ)
z	s	visit	vizit
zh	s	leisure	lēzher

Appendix D

KEY TO PRONUNCIATION OF PHONIC DECODING ITEMS (Monosyllabic)

	Real Words		Nonsense Words		
Item #:	Word:	Pronunciation(s):	Word:	Pronunciation(s):	Alternate Pronunciation(s):
1-1	hit	hit	jit	jit	
1-2	fed	fed	med	med	
1-3	nut	nut	dut	dut	
1-4	jog	jog	nog	nog	
1-5	lag	lag	pag	pag	
2-1	shut	shut	thut	thut	*th*ut (*th* as in *th*e)
2-2	path	path	sath	sath	
2-3	click	klik	glick	glik	
2-4	flesh	flesh	blesh	blesh	
2-5	drop	drop	brop	brop	
3-1	hide	hīd	mide	mīd	
3-2	cute	kūt	fute	fūt	fo͞ot (o͞o as in ro͞ol)
3-3	doze	dōz	voze	vōz	
3-4	fake	fāk	pake	pāk	
3-5	tone	tōn	sone	sōn	
4-1	brave	brāv	clave	klāv	
4-2	drove	drōv	chove	chōv	
4-3	flake	flāk	grake	grāk	
4-4	globe	glōb	trobe	trōb	
4-5	crime	krīm	drime	drīm	
5-1	loud	loud	roud	roud	
5-2	coin	koin	zoin	zoin	
5-3	raw	rô	taw	tô	
5-4	loaf	lōf	woaf	wōf	
5-5	bail	bāl	dail	dāl	
6-1	threw	thro͞o	prew	pro͞o	
6-2	grain	grān	thrain	thrān	
6-3	choice	chois	froice	frois	
6-4	bound	bound	spound	spound	
6-5	preach	prēch	fleach	flēch	flech (*e* as in thred)

(continued)

Appendix D (continued)

KEY TO PRONUNCIATION OF PHONIC DECODING ITEMS
(Polysyllabic)

Item #	Real Words — Word:	Pronunciation(s):	Nonsense Words — Word:	Pronunciation(s):	Alternate Pronunciation(s):
7-1	visit	vizit	lisit	lizit	lisit
7-2	pencil	pensil	jencil	jensil	
7-3	mitten	miten mitɤn	pitten	piten pitɤn	
7-4	puppet	pupet pupɤt	duppet	dupet dupɤt	
7-5	combat	kombat kɤmbat	wombat	wombat wɤmbat	woombat (*oo* as in *wooman*)
8-1	finish	finish	brinish	brinish	
8-2	pumpkin	pumpkin	thumpkin	thumpkin	
8-3	publish	publish	sublish	sublish	
8-4	splendid	splendid	glendid	glendid	
8-5	stiffen	stifen stifɤn	bliffen	blifen blifɤn	
9-1	beside	bisīd bēsīd	semide	semīd sēmīd	
9-2	mistake	mistāk	fistake	fistāk	
9-3	confuse	konfūz kɤnfūz	monfuse	monfūz mɤnfūz	monfūs (*s* as in *use*) mɤnfūs
9-4	rotate	rōtāt	motate	mōtāt	motāt (*o* as in *rot*)
9-5	awoke	ɤwōk	aboke	ɤbōk	abōk (*a* as in *apple*)
10-1	telephone	telefōn	delephote	delefōt	dēlfōt (long *ē*)
10-2	grateful	grātful	clateful	klātful	
10-3	provide	prōvīd prɤvid	drovide	drōvīd drɤvid	
10-4	explode	eksplōd	excrode	ekskrōd	
10-5	demonstrate	dem′ɤn strāt di mon′strāt	bemonthrate	bem′ɤn thrāt bi mon′thrāt	bē′mɤn thrāt (*ē* as in *bē*)
11-1	tower	touer (tower)	zower	zouer (zower)	zōer (long *ō*)
11-2	rooster	rōōster	cooster	kōōster	
11-3	sausage	sôsaj	wausage	wôsaj	wôsāj (long *ā*)
11-4	avoid	ɤvoid	atoid	ɤtoid	atoid (*a* as in *apple*)
11-5	announcer	ɤnounser	azzounder	ɤzounder	ăzounder
12-1	flower	flouer (flower)	strower	strouer (strower)	strōer (long *ō*)
12-2	complain	kɤmplān	lomprain	lɤmprān	lomprān (*o* as in *cop*)
12-3	creature	krēcher	threature	thrēcher	threcher (as in *thred*
12-4	embroider	embroider imbroider	emfroider	emfroider imfroider	
12-5	trouser	trouzer	clouser	klouzer	klouser (*s* as in *mouser*

Appendix E

PASSAGE ERRORS

Error Type	Definition	While testing record (in pencil):	After testing label (in red):
Error Substitution	Child gives a nonsense word in place of a word in the passage (see Point # 1).	Chief Black ~~glared~~ glared at the young reporter.	ES
Word Omission	Child omits word, or word is provided by tester after pause (see Point #3)	"But he's got to go!" (said) Farmer Gray.	O
Meaningful Substitution	Child gives another real word in place of a word in the passage (provided that the word is not a Transformation). (see Point # 1)	Suddenly she heard a ~~sneeze~~ sound come from the barn.	MS
Transformation	Child gives a version of a word in the passage which usually contains the same basic "root" word. Include: tense changes, addition or deletion of "s" or "ed" or other suffix, creation or separation of a contraction.	She and Red ~~drove~~ drive to the shop in town... Linda was ~~not~~ n't brave...	T
Word Addition	Child inserts word into the passage.	..and the ^two boys looked in...	WA
Inversion	Child changes the order of words in the passage.	You will find what (you are) looking...	I
Repetition	Child repeats a word. A group of words repeated (as a group) counts as one Repetition error.	Yes it is fun to run up and... Yes it is fun to run up and..	R
Hesitation/ Self-Correction	Child stumbles on a word, or pauses for more than 2 seconds, or immediately corrects an incorrect response.	Mary ~~shut~~ MS the box and hit it...	HS
Redirection	Child omits a group of words (at least 3) or a line. Tester should stop child and reorient him so that the omitted words can be attempted. If the child then makes other errors, these should be recorded and counted as well. (see point # 2)	She did not make one mistake. [When she finished,] I asked her to sit beside me.	RED
Punctuation	Child clearly ignores a punctuation mark, or inserts one where none exists (see Point # 4).	...Sam broke into a store. He tore his trousers... Sam would trudge ^from one place...	P

Appendix F

POINTS RELATED TO THE SCORING OF PASSAGE ERRORS

1. If the child gives a nonsense word in place of a word in the passage and the word *is not underlined* (i.e., not a Target Word) the Tester may simply cross out the word on the Test Protocol and write ES above it. If the child gives an incorrect "real" word in place of a non-target word in the passage, the Tester may cross it out and write MS above it. However, if an incorrect response is given for a *Target Word* (i.e., a word that is underlined once or twice), the Tester must write what the child says above the word.

2. If more than one Passage Error occurs on the same word, this counts as only one Passage Error. For example:

Child says:	Passage Error is:
"...as the ~~announcer~~ *old man* gave a perfect description..." (two words inserted for one word in passage)	1 MS
"If only I could leave the continent *MS*..." (hesitation and repetition on same word)	1 HS *or* 1 R
"...no doubt *at all* that one day he would be caught..." (two words inserted between two passage words)	1 WA
"no matter how cautious he might be." (more than one repetition of same word)	1 R

However, if the child must be redirected to read a phrase or sentence in the passage, the Tester counts the Redirection Error, as well as any other errors that occur after the redirection. For example:

["When she ~~finished~~ *furnished*,] I asked her to sit beside me." (redirection back to "When she finished," and "finished" is read incorrectly)	1 RED *and* 1 ES

3. More time is given for the child to respond to Target Words than to non-target words in the passage. If the child hesitates for at least 2 seconds on a Target Word, the Tester should promt (e.g., "Do you know the word?) before telling the child the word. If the child pauses on a non-target word for 2 seconds, the Tester should tell the child the word (circle and count as a Word Omission). Of course, if the child skips over any word entirely, this automatically counts as a Word Omission Error.

4. Punctuation Errors are determined as follows:

   A deleted punctuation mark occurs if the child fails to pause *and also* fails to indicate, through oral inflection, the presence of a punctuation mark.

   An inserted punctuation mark occurs if the child pauses where there is no mark *and also* indicates, through oral inflection, the presence of a punctuation mark.

   Uninflected question marks do not count as Punctuation Errors. Comma deletions count as errors *only if* they change the meaning of the sentence in an obvious way.

5. The time of each passage reading is recorded in the space below "Passage Error Scores."

Appendix G

COMPREHENSION SUPPLEMENT--ANSWER KEY

Passage Number	Questions	Correct Response(s)*
2	1. Who ran down the path?	the little dog
	2. Where was little dog?	in the box; hiding
	3. Why did't Mary see little dog?	little dog was too small; little dog was hiding in the box
	4. What did Mary do with the box?	she shut it; she hit it with a ball
	5. What did Mary do with little dog?	she played with little dog; she fed her; she took her out of the box
3	1. Who came to visit?	Sue; a friend
	2. What did Sue want to do?	sing
	3. What will mother make?	pumpkin cakes
	4. What will they do after they eat?	make things
	5. What will they make things with?	pencils, paints
4	1. At the beginning of the story, who was home?	Linda; Red
	2. What did they need from town?	wood; grain
	3. On the way to town, what did they hear?	a loud sound; another dog (Rocket)
	4. Who was brave?	Red (Linda's dog)
	5. At the end of the story, what did they all do?	played ball; went to bed
5	1. Why did Farmer Gray call Farmer John?	to complain; to get rid of the rooster
	2. Why did Farmer Gray want to get rid of the rooster?	he ate too much
	3. Where did Farmer Gray put the rooster?	in the barn; in a tower
	4. What was the rooster eating?	a banana; a flower
	5. What did Farmer John say he would do?	come and get the rooster
6	1. Where did Susan live?	on a (nut) farm; with her father
	2. What did Susan's father do the earn money?	he wrote songs
	3. Why was there a problem?	he had no songs to publish; he hadn't written a song; they were running out of money
	4. What did Susan do to help?	she wrote a song
	5. What was Susan's father doing when she went to look for him?	sleeping; taking a doze

*A correct answer includes at least 1 of the possible correct responses.

(continued)

Appendix G (continued)

COMPREHENSION SUPPLEMENT--ANSWER KEY

Passage Number	Questions	Correct Response(s)
7	1. Where did Harold live?	at the North Pole
	2. What did Harold catch?	a creature
	3. What did the creature eat?	snow flakes; (raw) sausage
	4. What id Harold tell the boys to do if they wanted to see his creature?	bring coins; help feed it
	5. What did the creature to when it saw Harold and the boys watching it?	it bounced up and down
8	1. Who came to see Detective X?	Mr. J ; a man whose puppet was stolen
	2. What was Mr. J's problem?	someone had stolen his puppet
	3. What was special about the puppet?	it talked; it looked like Mr. J; it looked so real
	4. How did the detective know where to look for the puppet?	the note on his door (told him where it was)
	5. Who did the pupptet look like?	Mr J
9	1. Who did Chief Black give instructions to?	the (young) reporter; Jim
	2. What were the instructions?	make contact with Hit Man; find out Hit Man's plans; go to an abandonned bakery; get the facts in the case
	3. What did Hit Man plan to do?	turn himself in
	4. Who would get the reward money?	Hit Man's wife; Hit man's kids
	5. What was Jim going to get?	the story; the headline that said he was a "Star Reporter"
10	1. What woke the men of Company C up?	the (emergency) siren
	2. What was happenning when they woke up?	the enemy was attacking
	3. What did the sign the men made advertize?	(delicious) food
	4. What were the men of company C doing while the enemy was attacking?	lying around the camp; pretending to be dead; hiding and watching to see what would happen
	5. What did the enemy think when they saw the men lying around the camp?	that they were dead; that they had eaten bad food; that everyone had been poisoned
11	1. Why was Sam desperate?	he had no money; he couldn't find work; he had a family to feed
	2. What did Sam do because he was desperate and couldn't find work?	he robbed a store
	3. What did Sam find at the store?	20 dollars; a small amount of money
	4. What did Sam find out from the T.V. news?	that they had his description; that they knew who he was
	5. What did Sam's neighbors do?	they went to the jail; demonstrated their support for him; bailed him out of jail

Appendix H

RESPONSE CODES FOR TARGET WORDS

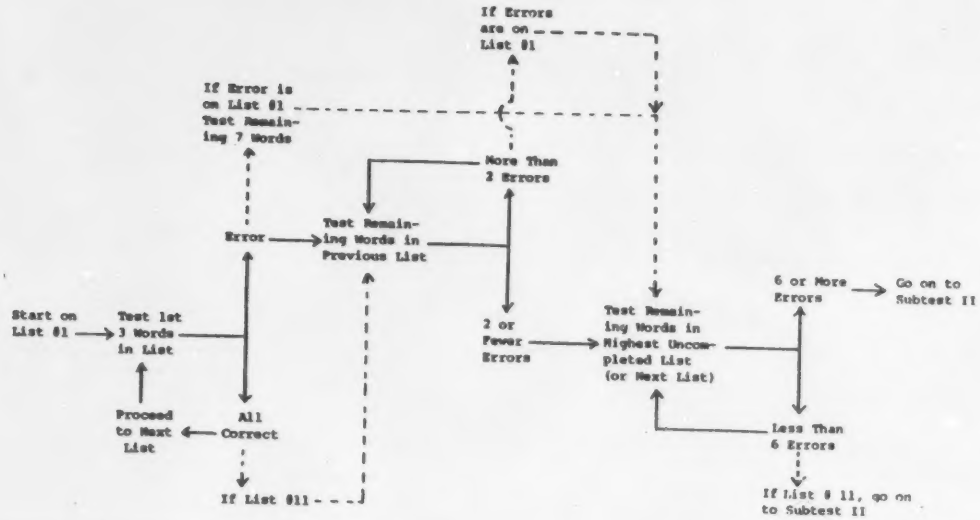
If the Passage Record Shows:	The Passage Error Is:	The Response Code Is:
No marks above or around word	no error	1
An HS written above word	HS*	2
A repetition mark (_____) below word	R*	2
A transformation (e.g. arrive/)	T*	1 or 2
An inversion (∿)	I*	1 or 2
The word circled	O**	4
The word crossed out and a nonsense word written above it	ES**	5, 6, or 7
The word crossed out and another real word written above it	MS**	5, 6, or 7

* Passage Errors not counted as Target Word errors

**Passage Errors counted as Target Word errors

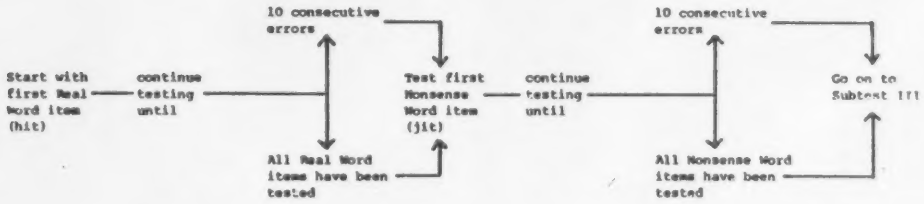
Appendix I

SEQUENCE OF ITEM ADMINISTRATION IN SUBTEST I


If Errors are on List #1
If Error is on List #1 Test Remaining 7 Words
More Than 2 Errors
Error
Test Remaining Words in Previous List
6 or More Errors
Go on to Subtest II
Start on List #1
Test 1st 3 Words in List
2 or Fewer Errors
Test Remaining Words in Highest Uncompleted List (or Next List)
Proceed to Next List
All Correct
Less Than 6 Errors
If List #11
If List # 11, go on to Subtest II

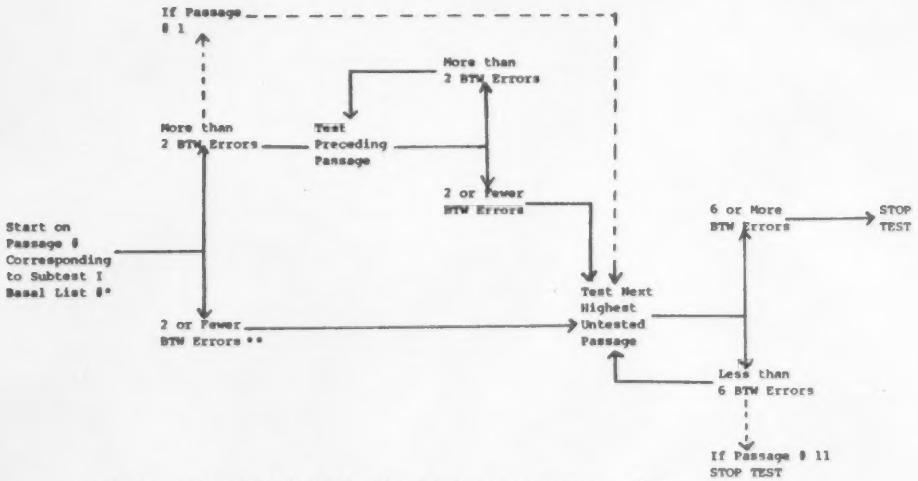
Appendix J

SEQUENCE OF ITEM ADMINISTRATION IN SUBTEST II


10 consecutive errors
Start with first Real Word item (hit)
continue testing until
Test first Nonsense Word item (jit)
continue testing until
10 consecutive errors
Go on to Subtest III
All Real Word items have been tested
All Nonsense Word items have been tested

Appendix K

SEQUENCE OF PASSAGE ADMINISTRATION IN SUBTEST III


If Passage # 1
More than 2 BTW Errors
More than 2 BTW Errors
Test Preceding Passage
2 or Fewer BTW Errors
6 or More BTW Errors
STOP TEST
Start on Passage # Corresponding to Subtest I Basal List #*
Test Next Highest Untested Passage
2 or Fewer BTW Errors **
Less than 6 BTW Errors
If Passage # 11 STOP TEST

*If Subtest I Basal Level is below List # 1 (-B), Subtest III not given.
If Subtest I Basal Level is above List #11 (B+), start on Passage # 10.

**Only Basal Target Words (BTW) are considered in determining sequence of passage administration in Subtest III.

Appendix L

CODE BOOK FOR SUMMARY TEST SCORES

Col.#s	Variable	Description	Example
4-12	Child ID	Child's identification number	000016789
14-15	Child's initials		SF
17-18	School ID#	School's identification number	03 (school # 3)
19	Grade	Grade at time of testing	3 (Third Grade)
20	Sex	Child's sex	0=male; 1=female
21-22	D.O.B. Month		01 (January)
23-24	D.O.B. Day	Child's birthdate	10 (tenth)
25-26	D.O.B. Year		69 (1969)
28-29	D.O.T. Month		10 (October)
30-31	D.O.T. Day	Date of testing	08 (eighth)
32-33	D.O.T. Year		79 (1979)
35-36	C.A. Years	Child's chronological age	10 (10 years and
37-38	C.A. Months		09 9 months)
40-42	BWR-R.S.	Subtest I (Basal Word Recognition)-Raw Score	087 (87 items correct)
43-44	BWR-80% G.E. (X.X)	Subtest I Basal Level list converted to Grade Equivalent as follows: List# = G.E. List# = G.E. List# = G.E. -1 = 1.0 4 = 2.3 9 = 4.8 1 1.3 5 2.8 10 5.3 2 1.6 6 3.3 11 5.8 3 1.9 7 3.8 11+ 99(no data) 8 4.3	33 (Basal Level List #6 converts to G.E. of 3.3)
45-46	BWR-<50% G.E.(X.X)	Subtest I Ceiling Level list, converted to Grade Equivalent (use chart above, except no -1 or 11+; "no ceiling"=99)	53 (Ceiling Level List # 10 converts to G.E. of 5.3)
47-49	OR-BTW-R.S.	Subtest III (Oral Reading) Basal Target Words-Raw Score	067 (67 Basal Target Words correct)
50-51	OR-80% G.E. (X.X)	Subtest III Basal Level passage, converted to Grade Equivalent (use chart above)	38 (Basal Level Passage # 7 converts to G.E. of 3.8)
52-53	OR-<50% G.E. (X.X)	Subtest III Ceiling Level passage, converted to Grade Equivalent (use chart above, except no -1 or 11+; "no ceiling"=99)	99 (child did not reach ceiling on Subtest III)
54	OR-# PTW correct at 80% G.E.	Number of Phonic Target Words correct on Subtest III Basal Level passage	5 (5 Phonic Target Words correct)
55	OR-# PTW correct at <50% G.E.	Number of Phonic Target Words correct on Subtest III Ceiling Level passage	3 (3 Phonic Target Words correct)
56-57	OR-#Passage Errors at 80% G.E.	Number of Passage Errors on Basal Level passage	6 (6 Passage Errors)
58-59	OR-#Passage Errors at <50% G.E.	Number of Passage Errors on Ceiling Level passage	15 (15 Passage Errors)
61-62	PD-MSRW correct	Number of Monosyllabic Real Words correct	29 (29 MSRW correct)
63-64	PD-MSNW correct	Number of Monosyllabic Nonsense Words correct	20 (20 MSNW correct)
65-66	PD-PSRW correct	Number of Polysyllabic Real Words correct	24 (24 PSRW correct)
67-68	PD PSNW correct	Number of Polysyllabic Nonsense Words correct	12 (12 PSNW correct)
69	Comp. Supp. 2 # correct	Number of comprehension questions correct on Passage # 2 (use 99 if not given)	99 (Passage # 2 was not read)
70	Comp. Supp. 3	Number questions correct on Passage #3	99
71	Comp. Supp. 4	" " #4	5 (5 correct)
72	Comp. Supp. 5	" " #5	5 (5 correct)
73	Comp. Supp. 6	" " #6	4 (4 correct)
74	Comp. Supp. 7	" " #7	4 (4 correct)
75	Comp. Supp. 8	" " #8	5 (5 correct)
76	Comp. Supp. 9	" " #9	3 (3 correct)
77	Comp. Supp. 10	" " #10	1 (1 correct)
78	Comp. Supp. 11	" " #11	0 (none correct)

References

Baker, F.B. Advances in item analysis. *Review of Educational Research*, 1977, *47*, 151-178.

Botel, M. *Botel predicting readability levels*. Chicago: Follett, 1962.

Campbell, D., & Fiske, D. Convergent and discriminant validation by the multi-trait-multimethod matrix. *Psychological Bulletin*, 1959, *56*(2), 81-105.

Guilford, J.P. *Fundamental statistics in psychology and education* (4th ed.). New York: McGraw-Hill, 1965.

Harris, A.J., & Jacobson, M.D. *Basic elementary reading vocabularies*. New York: MacMillan, 1972.

Thorndike, R., & Hagen, E. *Measurement and evaluation in psychology and education* (4th ed.). New York: John Wiley & Sons, 1977.

REFERENCE NOTES

1. Richardson, E., DiBenedetto, B., & Adler, A. *The use of the decoding skills test in the measurement of auditory and visual word recognition skills*. Paper presented at the twenty-fourth annual convention of the International Reading Association, Atlanta, April 1979.

2. Richardson, E. *Sixth report of the decoding skills test project* (Contract N01-HD-2837). Submitted to National Institute of Child Health and Human Development, Bethesda, Md., May 1979.

DST DIAGNOSTIC SCORING INFORMATION

Child's Name _____ School _____ Grade ____ Room _____

FT ID# _ _ _ _ _ _ _ _ _ _ Sex _____ Tester's Initials _____

	Month	Day	Year		
Date of Test	____	____	____	Age in Years & Months	____ ____
Date of Birth	____	____	____		
Age Computat.	____	____	____		

INFORMATION RELATED TO BASAL READER INSTRUCTION

	Raw Score	Estimated Instructional Level	Estimated Frustration Level	Passage Errors at Instructional Level	Phonic Word Score at Instructional Level
Basal Words in Isolation	____/110	_____	_____		
Basal Words in Oral Reading	____/110	_____	_____	_____	____/6
Comprehension scores at:		____/5	____/5		

INFORMATION RELATED TO PHONIC DECODING ABILITY

	Monosyllabic Real Words	Monosyllabic Nonsense Words	Polysyllabic Real Words	Polysyllabic Nonsense Words
Phonic Decoding Summary	____/30	____/30	____/30	____/30

	CVC	CCVCC	CVC$\not$	CCVC$\not$	CVVC	CCVVCC
Monosyllabic Real Words	____/5	____/5	____/5	____/5	____/5	____/5
Monosyllabic Nonsense Words	____/5	____/5	____/5	____/5	____/5	____/5
Polysyllabic Real Words	____/5	____/5	____/5	____/5	____/5	____/5
Polysyllabic Nonsense Words	____/5	____/5	____/5	____/5	____/5	____/5

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DIAGNOSTIC-PRESCRIPTIVE INFORMATION CODES

Basal Vocabulary Level	Specific Problem Areas	Phonic Decoding Development
_____	_____	_____

DECODING SKILLS TEST:

SUMMARY TEST SCORES

Item	Code	Col.#s
Card #	0 1	1-2
(blank column)	----	3
Child ID	_ _ _ _ _ _ _ _ _	4-12
(blank column)	----	13
Child's initials	_ _	14-15
(blank column)	----	16
School ID#	_ _	17-18
Grade	____	19
Sex	____	20
D.O.B. Month	_ _	21-22
D.O.B. Day	_ _	23-24
D.O.B. Year	_ _	25-26
(blank column)	----	27
D.O.T. Month	_ _	28-29
D.O.T. Day	_ _	30-31
D.O.T. Year	_ _	32-33
(blank column)	----	34
C.A. (Years)	_ _	35-36
C.A. (Months	_ _	37-38
(blank column)	----	39
BWR-R.S.	_ _ _	40-42
BWR-80% G.E. (X.X)	_ _	43-44
BWR-<50% G.E. (X.X)	_ _	45-46
OR-BTW-R.S.	_ _ _	47-49
OR-80% G.E. (X.X)	_ _	50-51
OR-<50% G.E. (X.X)	_ _	52-53
OR-# PTW correct at 80% G.E.	___	54
OR-#PTW Correct at <50% G.E.	____	55
OR-#passage errors, 80% G.E.	_ _	56-57
OR-#passage errors, <50%	_ _	58-59
(blank column)	----	60
PD-MSRW-total correct	_ _	61-62
PD-MSNW-total correct	_ _	63-64
PD-PSRW-total correct	_ _	65-66
PD-PSNW-total correct	_ _	67-68
Comp. Supp. 2: # correct	____	69
Comp. Supp. 3: # correct	____	70
Comp. Supp. 4: # correct	____	71
Comp. Supp. 5: # correct	____	72
Comp. Supp. 6: # correct	____	73
Comp. Supp. 7: # correct	____	74
Comp. Supp. 8: # correct	____	75
Comp. Supp. 9: # correct	____	76
Comp. Supp 10: # correct	____	77
Comp. Supp. 11: # correct	____	78
Tester's initials	_ _	79-80

BASAL WORD RECOGNITION (SUBTEST I)

KEYPUNCH:	Code	Col. #
(Card number)	0 2	1-2
(blank column)		3
(ID #)_ _ _ _ _ _ _ _ _		4-12

Item #	Word	Response	Code	Col. #
	(blank column)			13
1- 1	to			14
1- 2	yes			15
1- 3	the			16
1- 4	up			17
1- 5	a			18
1- 6	in			19
1- 7	at			20
1- 8	it			21
1- 9	is			22
1-10	I			23
	(blank column)			24
2- 1	so			25
2- 2	was			26
2- 3	went			27
2- 4	let			28
2- 5	box			29
2- 6	she			30
2- 7	no			31
2- 8	am			32
2- 9	help			33
2-10	jump			34
	(blank column)			35
3- 1	sing			36
3- 3	when			37
3- 3	next			38
3- 4	thing			39
3- 5	I'll			40
3- 6	now			41
3- 7	other			42
3- 8	best			43
3- 9	new			44
3-10	long			45
	(blank column)			46
4- 1	shop			47
4- 2	fine			48
4- 3	end			49
4- 4	part			50
4- 5	dear			51
4- 6	dry			52
4- 7	wood			53
4- 8	better			54
4- 9	begin			55
4-10	start			56

Item #	Word	Response	Code	Col. #
	(blank column)			57
5- 1	strong			58
5- 2	able			59
5- 3	almost			60
5- 4	angry			61
5- 5	star			62
5- 6	space			63
5- 7	else			64
5- 8	knew			65
5- 9	short			66
5-10	banana			67
	(blank column)			68
6- 1	famous			69
6- 2	daughter			70
6- 3	crowd			71
6- 4	indeed			72
6- 5	field			73
6- 6	finally			74
6- 7	sneeze			75
6- 8	earn			76
6- 9	problem			77
6-10	worry			78
	(blank columns)			79-80
	(card number)	0 3		1-2
	(blank column)			3
	(ID #)_ _ _ _ _ _ _ _ _			4-12
	(blank column)			13
7- 1	natural			14
7- 2	mutter			15
7- 3	coin			16
7- 4	prove			17
7- 5	bounce			18
7- 6	pleasant			19
7- 7	arrive			20
7- 8	shelter			21
7- 9	square			22
7-10	protect			23

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BASAL WORD RECOGNITION (SUBTEST I)

Item #	Word	Response	Code	Col. #	Item #	Word	Response	Code	Col. #
	(blank column)		----	24		*(blank column)*		----	46
8- 1	stalk	_____	____	25	10- 1	frequent	_____	____	47
8- 2	project	_____	____	26	10- 2	purchase	_____	____	48
8- 3	stern	_____	____	27	10- 3	advertize	_____	____	49
8- 4	shallow	_____	____	28	10- 4	quality	_____	____	50
8- 5	pace	_____	____	29	10- 5	terrify	_____	____	51
8- 6	area	_____	____	30	10- 6	vast	_____	____	52
8- 7	custom	_____	____	31	10- 7	emergency	_____	____	53
8- 8	bush	_____	____	32	10- 8	ridge	_____	____	54
8- 9	detective	_____	____	33	10- 9	reckon	_____	____	55
8-10	design	_____	____	34	10-10	confident	_____	____	56
	(blank column)		----	35		*(blank column)*		----	57
9- 1	instruction	_____	____	36	11- 1	continent	_____	____	58
9- 2	contact	_____	____	37	11- 2	trudge	_____	____	59
9- 3	glare	_____	____	38	11- 3	desperate	_____	____	60
9- 4	furnish	_____	____	39	11- 4	awkward	_____	____	61
9- 5	justice	_____	____	40	11- 5	distress	_____	____	62
9- 6	extend	_____	____	41	11- 6	cautious	_____	____	63
9- 7	resolve	_____	____	42	11- 7	doubt	_____	____	64
9- 8	stride	_____	____	43	11- 8	solemn	_____	____	65
9- 9	dignity	_____	____	44	11- 9	prairie	_____	____	66
9-10	abandon	_____	____	45	11-10	swollen	_____	____	67

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PHONIC DECODING-REAL WORDS (SUBTEST II)

Item #	Word	Response	Code	Col. #	Item #	Word	Response	Code	Col. #
	(blank column)		----	*68*		*(blank column)*		----	*35*
1-1	hit			*69*	7-1	visit			*36*
1-2	fed			*70*	7-2	pencil			*37*
1-3	nut			*71*	7-3	mitten			*38*
1-4	jog			*72*	7-4	puppet			*39*
1-5	lag			*73*	7-5	combat			*40*
2-1	shut			*74*	8-1	finish			*41*
2-2	path			*75*	8-2	pumpkin			*42*
2-3	stack			*76*	8-3	publish			*43*
2-4	flesh			*77*	8-4	splendid			*44*
2-5	prop			*78*	8-5	stiffen			*45*
	(blank columns)			*79-80*					
	(card number)		*0 4*	*1-2*					
	(blank column)		----	*3*					
	(ID #)			*4-12*					
	(blank column)		----	*13*		*(blank column)*		----	*46*
3-1	hide			*14*	9-1	beside			*47*
3-2	cute			*15*	9-2	mistake			*48*
3-3	doze			*16*	9-3	confuse			*49*
3-4	fake			*17*	9-4	rotate			*50*
3-5	one			*18*	9-5	awoke			*51*
4-1	brave			*19*	10-1	telephone			*52*
4-2	drove			*20*	10-2	grateful			*53*
4-3	flake			*21*	10-3	provide			*54*
4-4	globe			*22*	10-4	explode			*55*
4-5	crime			*23*	10-5	demonstrate			*56*
	(blank column)		----	*24*		*(blank column)*		----	*57*
5-1	loud			*25*	11-1	tower			*58*
5-2	join			*26*	11-2	rooster			*59*
5-3	raw			*27*	11-3	sausage			*60*
5-4	loaf			*28*	11-4	avoid			*61*
5-5	bail			*29*	11-5	announcer			*62*
6-1	threw			*30*	12-1	flower			*63*
6-2	grain			*31*	12-2	complain			*64*
6-3	choice			*32*	12-3	creature			*65*
6-4	bound			*33*	12-4	enbroider			*66*
6-5	preach			*34*	12-5	trouser			*67*

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PHONIC DECODING -NONSENSE WORDS (SUBTEST II)

Item #	Word	Response	Code	Col. #	Item #	Word	Response	Code	Col. #
	(blank column)		----	*68*		*(blank column)*		----	*35*
1-1	jit			*69*	7-1	lisit			*36*
1-2	med			*70*	7-2	jencil			*37*
1-3	dut			*71*	7-3	pitten			*38*
1-4	nog			*72*	7-4	duppet			*39*
1-5	pag			*73*	7-5	wombat			*40*
2-1	thut			*74*	8-1	brinish			*41*
2-2	sath			*75*	8-2	thumpkin			*42*
2-3	glick			*76*	8-3	sublish			*43*
2-4	blesh			*77*	8-4	glendid			*44*
2-5	brop			*78*	8-5	bliffen			*45*
	(blank columns)		----	*79-80*					
	(card number)		*0 5*	*1-2*					
	(blank column)		----	*3*					
	(ID #)			*4-12*					
	(blank column)		----	*13*		*(blank column)*		----	*46*
3-1	mide			*14*	9-1	semide			*47*
3-2	fute			*15*	9-2	fistake			*48*
3-3	voze			*16*	9-3	monfuse			*49*
3-4	pake			*17*	9-4	motate			*50*
3-5	sone			*18*	9-5	aboke			*51*
4-1	clave			*19*	10-1	delephote			*52*
4-2	chove			*20*	10-2	clateful			*53*
4-3	grake			*21*	10-3	drovide			*54*
4-4	trobe			*22*	10-4	excrode			*55*
4-5	drime			*23*	10-5	bemonthrate			*56*
	(blank column)		----	*24*		*(blank column)*		----	*57*
5-1	roud			*25*	11-1	zower			*58*
5-2	zoin			*26*	11-2	cooster			*59*
5-3	taw			*27*	11-3	wausage			*60*
5-4	woaf			*28*	11-4	atoid			*61*
5-5	dail			*29*	11-5	azzounder			*62*
6-1	prew			*30*	12-1	strower			*63*
6-2	thrain			*31*	12-2	lomprain			*64*
6-3	froice			*32*	12-3	threature			*65*
6-4	spound			*33*	12-4	emfroider			*66*
6-5	fleach			*34*	12-5	clouser			*67*

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ORAL PASSAGES (SUBTEST III)

Passage # 1

I can run. A dog can run. The man in the hat can run. Look at the man run. Is it fun? Yes, it is fun to run up and down.

Card 05 (continued)

Basal Target Words

Item #	Word	*Code*	*Col. #*	Item #	Word	*Code*	*Col. #*
(blank column)		----	*68*				
1-B1	I	____	*69*	1-B6	yes	____	*74*
1-B2	a	____	*70*	1-B7	it	____	*75*
1-B3	the	____	*71*	1-B8	is	____	*76*
1-B4	in	____	*72*	1-B9	to	____	*77*
1-B5	at	____	*73*	1-B10	up	____	*78*
				(blank columns)		----	*79-80*

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Card 08 (continued)

PASSAGE SCORES

Error Type	Marking Symbols	# Errors (Code)	*Col. #s*	Error Type	Marking Symbols	# Errors (Code)	*Col. #s*
Error Substitution	droog dog ES		*48-49*	Inversion	(I am) I		*64-65*
Word Omission	(dog) O		*50-51*	Repetition	dog R		*66-67*
Meaningful Substituion	cat dog MS		*52-53*	Hesitation/ Self-Correction	dog HS		*68-69*
Transformation	has had T		*54-55*	Redirection	[ ] RED		*70-71*
Word Addition	WA		*56-57*	Punctuation	⊙ ? P		*72-73*
	(blank column)		*58*				
Passage Time — minutes			*59-60*	Total # Passage Errors			*74-75*
Passage Time — seconds			*61-62*	*(blank columns)*			*76-80*
	(blank column)		*63*				

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ORAL PASSAGES (SUBTEST III)

Passage # 2

The cute little dog ran down the path. She went to hide.
She was so little that Mary did not see her jump into the box.
"Let me look for little dog," said Mary.
Mary shut the box and hit it with a ball.
"No, no," said little dog. "Help, help! I am in the box."
It was fun to play. Mary fed little dog.

	Code	Col.#
(card number)	0 6	1-2
(blank column)	----	3
(ID#)	_ _ _ _ _ _ _ _ _	4-12

	Basal Target Words						Phonic Target Words			
Item#	Word	Code	Col.#	Item #	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)		----	13								
2-B1	she	____	14	2-B6	box	____	19	2-P1	cute	____	24
2-B2	went	____	15	2-B7	let	____	20	2-P?	path	____	25
2-B3	was	____	16	2-B8	no	____	21	2-P3	hide	____	26
2-B4	so	____	17	2-B9	help	____	22	2-P4	shut	____	27
2-B5	jump	____	18	2-B10	am	____	23	2-P5	hit	____	28
								2-P6	fed	____	29

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	Code	Col. #
(Card number)	0 9	1-2
(blank column)	----	3
(ID #)	_ _ _ _ _ _ _ _ _	4-12
(blank column)	----	13

Error Type	Marking Symbols	# Errors (Code)	Col. #s	Error Type	Marking Symbols	# Errors (Code)	Col. #s
Error Substitution	droog dog ES	____	14-15	Inversion	(I am) I	____	30-31
Word Omission	(dog) O	____	16-17	Repetition	dog R	____	32-33
Meaningful Substituion	cat dog MS	____	18-19	Hesitation/ Self-Correction	HS dog HS	____	34-35
Transformation	has had T	____	20-21	Redirection	[ ] RED	____	36-37
Word Addition	WA	____	22-23	Punctuation	⊙ ? ^ P	____	38-39
	(blank column)		24				
Passage Time	minutes	____	25-26	Total # Passage Errors		____	40-41
	seconds	____	27-28		(blank column)		42
	(blank column)		29				

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ORAL PASSAGES (SUBTEST III)

Passage # 3

My friend Sue came to visit me.

"Let me sing for you," she said.

"Sing a new one," I said.

"I'll sing my best one," said Sue. It was long. She did not make one mistake. When she finished, I asked her to sit beside me.

"Now my mother will make pumpkin cakes for us. One for me and the other for you," I said to Sue. "After we eat the pumpkin cakes we will make funny things with pencils and paints. For the next visit, I will come see you."

Card 06 (continued)

			Basal Target Words					Phonic Target Words			
Item#	Word	Code	Col.#	Item #	Word	Code	Col.#	Item #	Word	Code	Col.#
(blank column)		----	*30*								
3-B1	sing	____	*31*	3-B6	when	____	*36*	3-P1	visit	____	*41*
3-B2	new	____	*32*	3-B7	now	____	*37*	3-P2	mistake	____	*42*
3-B3	I'll	____	*33*	3-B8	other	____	*38*	3-P3	finished	____	*43*
3-B4	best	____	*34*	3-B9	things	____	*39*	3-P4	beside	____	*44*
3-B5	long	____	*35*	3-B10	next	____	*40*	3-P5	pumpkin	____	*45*
								3-P6	pencils	____	*46*

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PASSAGE SCORES

Card 09 (continued)

Error Type	Marking Symbols	# Errors (Code)	Col. #s	Error Type	Marking Symbols	# Errors (Code)	Col. #s
Error Substitution	droog dog ES		*43-44*	Inversion	(I am) I		*59-60*
Word Omission	(dog) O		*45-46*	Repetition	dog R		*61-62*
Meaningful Substituion	cat dog MS		*47-48*	Hesitation/ Self-Correction	mi MS dog HS		*63-64*
Transformation	has had T		*49-50*	Redirection	[ ] RED		*65-66*
Word Addition	WA		*51-52*	Punctuation	⊙ P		*67-68*
	(blank column)		*53*				
Passage Time — minutes			*54-55*	Total # Passage Errors			*69-70*
Passage Time — seconds			*56-57*		*(blank columns)*		*71-80*
	(blank column)		*58*				

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ORAL PASSAGES (SUBTEST III)

Passage # 4

At the end of a fine day in fall, Linda was at home.

"It will begin to get cold soon," she said to her dear dog, Red.

"I had better start a fire, but I must get some dry wood. We need grain too."

She and Red drove to the shop in town for wood and grain. On the way home, Linda and Red heard a loud sound. Linda was not brave, but Red was. He jumped out of the car to see what made the loud sound. Red was surprised to see a dog just like him. The dog's name was Rocket. Red asked Rocket to join them in the car. Back home, Linda threw a ball to Red and Rocket for part of the night and when they were sleepy, they went to bed.

Card 08 (continued)

Basal Target Words								Phonic Target Words					
Item#	Word	*Code*	*Col.#*	Item #	Word	*Code*	*Col.#*	Item#	Word	*Code*	*Col.#*		
(blank column)		----	*47*										
4-B1	end	____	*48*	4-B6	start	____	*53*	4-P1	grain	____	*58*		
4-B2	fine	____	*49*	4-B7	dry	____	*54*	4-P2	drove	____	*59*		
4-B3	begin	____	*50*	4-B8	wood	____	*55*	4-P3	loud	____	*60*		
4-B4	dear	____	*51*	4-B9	shop	____	*56*	4-P4	brave	____	*61*		
4-B5	better	____	*52*	4-B10	part	____	*57*	4-P5	join	____	*62*		
								4-P6	threw	____	*63*		

(go to p. 10)

	Code	*Col. #*
(Card number)	*1 0*	*1-2*
(blank column)	----	*3*
(ID #)	_ _ _ _ _ _ _ _	*4-12*
(blank column)	----	*13*

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Error Substitution	droog dog	ES		*14-15*
Word Omission	(dog)	O		*16-17*
Meaningful Substituion	cat dog	MS		*18-19*
Transformation	has had	T		*20-21*
Word Addition		WA		*22-23*
		(blank column)		*24*
Passage Time		minutes		*25-26*
		seconds		*27-28*
		(blank column)		*29*

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Inversion	(I am)	I		*30-31*
Repetition	dog mi	R		*32-33*
Hesitation/ Self-Correction	dog Hs	HS		*34-35*
Redirection	[ ]	RED		*36-37*
Punctuation	⊙ ?	P		*38-39*
Total # Passage Errors				*40-41*
		(blank column)		*42*

(go to p. 10)

ORAL PASSAGES (SUBTEST III)

Passage # 5

Farmer Gray called Farmer John to complain about the rooster he got from Farmer John.

"I knew that bird was strong," said Farmer Gray over the telephone, but he eats and eats. In a short space of time, almost all the food in the house is gone!"

"But that is a star rooster," said Farmer John.

"But he's got to go!" said Farmer Gray. "I don't know what else to do!" He was angry now.

"Where is the bird now?" asked Farmer John.

"He's up in the barn tower eating a banana and a flower. He eats flowers too," said Farmer Gray.

"I'll come and get him as soon as I am able to," said Farmer John.

"Thank you. I'm grateful," said Farmer Gray.

Card 06 (continued)

	Basal Target Words						Phonic Target Words					
Item#	Word	Code	Col.#	Item #	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)	----		*64*					5-P1	complain	____	*75*
5-B1	knew	____	*65*	5-B6	star	____	*70*	5-P2	rooster	____	*76*
5-B2	strong	____	*66*	5-B7	else	____	*71*	5-P3	telephone	____	*77*
5-B3	short	____	*67*	5-B8	angry	____	*72*	5-P4	tower	____	*78*
5-B4	space	____	*68*	5-B9	banana	____	*73*	5-P5	flower	____	*79*
5-B5	almost	____	*69*	5-B10	able	____	*74*	5-P6	grateful	____	*80*

(go to p. 11)

Card 10 (continued)

PASSAGE SCORES

Error Type	Marking Symbols	# Errors (Code)	Col. #s	Error Type	Marking Symbols	# Errors (Code)	Col. #s
Error Substitution	droog dog ES	____	*43-44*	Inversion	(I am) I	____	*59-60*
Word Omission	(dog) O	____	*45-46*	Repetition	dog R	____	*61-62*
Meaningful Substituion	cat dog MS	____	*47-48*	Hesitation/ Self-Correction	HS dog HS	____	*63-64*
Transformation	has had T	____	*49-50*	Redirection	[ ] RED	____	*65-66*
Word Addition	WA	____	*51-52*	Punctuation	P	____	*67-68*
	(blank column)		*53*				
Passage Time ___ minutes		____	*54-55*	Total # Passage Errors		____	*69-70*
___ seconds		____	*56-57*		*(blank columns)*		*71-80*
	(blank column)		*58*				

(go to p. 11)

Page 11

ORAL PASSAGES (SUBTEST III)
Passage #6

Susan was the daughter of a man who lived on a nut farm. Her father wrote songs to earn money. For one year he didn't have any songs to publish. It was indeed a big problem.

Susan didn't like to see her father worry, so she went into the field with paper and a pen to try to write a song. After three hours Susan finally had a song about a boy with a mitten. She ran to tell her father, but couldn't find him. Suddenly, she heard a sneeze come from the barn. There was her father taking a doze beside a stack of wood.

"Daddy, I wrote a song," she yelled.

"Don't confuse me while I'm sleeping. How could you write a song?"

"Listen to it dad."

The beautiful song made Susan famous, and crowds loved it all around the world.

	Code	Col.#
(card number)	0 7	1-2
(blank column)	----	3
(ID#)	_ _ _ _ _ _ _ _ _	4-12

Basal Target Words

Item#	Word	Code	Col.#	Item #	Word	Code	Col.#
(blank column)		----	13				
6-B1	daughter	____	14	6-B6	field	____	19
6-B2	earn	____	15	6-B7	finally	____	20
6-B3	indeed	____	16	6-B8	sneeze	____	21
6-B4	problem	____	17	6-B9	famous	____	22
6-B5	worry	____	18	6-B10	crowds	____	23

Phonic Target Words

Item#	Word	Code	Col.#
6-P1	nut	____	24
6-P2	publish	____	25
6-P3	mitten	____	26
6-P4	doze	____	27
6-P5	stack	____	28
6-P6	confuse	____	29

(go to p.12)

	Code	Col. #
(Card number)	1 1	1-2
(blank column)	----	3
(ID #)	_ _ _ _ _ _ _ _ _	4-12
(blank column)		13

PASSAGE SCORES

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Error Sub.	dog (drooz)	ES	____	14-15
Word Omis.	(or)	O	____	16-17
Mean. Sub.	dog (cat)	MS	____	18-19
Trans.	he (has)	T	____	20-21
Word Add.	^	WA	____	22-23
(blank column)			----	24
Passage Time	minutes		____	25-26
	seconds		____	27-28
(blank column)			----	29

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Invers.	(I am)	I	____	30-31
Repet.	dog	R	____	32-33
Hes/Sel.Cor.	dog	HS	____	34-35
Redir.	⌐ ¬	RED	____	36-37
Punct.	⊙ ˙A	P	____	38-39
Total # Passage Errors			____	40-41
(blank column)			----	42

(go to p. 12)

ORAL PASSAGES (SUBTEST III)
Passage #7

A boy named Harold, who lived at the North Pole, caught a creature and kept it in a small shelter to protect it. Every day Harold had to provide his creature with raw sausage for food and snow flakes for water.

The other boys at Harold's school thought that Harold was a square for saying he had a creature that ate raw sausage. One day Harold heard the boys muttering about how square they thought Harold was. He jumped up and said, "I'll prove it. If everyone brings me one coin to help me pay for its food, I'll show it to you."

Naturally, it was an easy choice. All the boys arrived at Harold's house. He took them to the shelter and the boys looked in through the windows. When the creature saw the boys watching it, it started to bounce up and down. Then Harold and the boys took the coins to the store to buy raw sausage and they had a pleasant day feeding the creature.

Card 07 (continued)

Basal Target Words								Phonic Target Words			
Item#	Word	*Code*	*Col.#*	Item#	Word	*Code*	*Col.#*	Item#	Word	*Code*	*Col.#*
(blank column)	-----		*30*					7-P1	creature	____	*41*
7-B1	shelter	____	*31*	7-B6	coin	____	*36*	7-P2	provide	____	*42*
7-B2	protect	____	*32*	7-B7	naturally	____	*37*	7-P3	raw	____	*43*
7-B3	square	____	*33*	7-B8	arrived	____	*38*	7-P4	sausage	____	*44*
7-B4	muttering	____	*34*	7-B9	bounce	____	*39*	7-P5	flakes	____	*45*
7-B5	prove	____	*35*	7-B10	pleasant	____	*40*	7-P6	choice	____	*46*

(go to p. 13)

Card # 11 (continued)

PASSAGE SCORES

Error Type	Marking Symbols		# Errors (Code)	Col. #s	Error Type	Marking Symbols		# Errors (Code)	Col. #s
Error Sub.	dog dress	ES	____	*43-44*	Invers.	I am	I	____	*59-60*
Word Omis.	dog	O	____	*45-46*	Repet.	dog	R	____	*61-62*
Mean. Sub.	dog has	MS	____	*47-48*	Hes/Sel.Cor.	dog HS	HS	____	*63-64*
Trans.	had has	T	____	*49-50*	Redir.	⊏ ⊐	RED	____	*65-66*
Word Add.	^	WA	____	*51-52*	Punct.	⊙ ȧ	P	____	*67-68*
	(blank column)		----	*53*	Total # Passage Errors			____	*69-70*
Passage Time	minutes		____	*54-55*		*(blank columns)*		----	*71-80*
	seconds		____	*56-57*				*(go to p. 13)*	
	(blank column)		----	*58*					

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ORAL PASSAGES (SUBTEST III)
Passage #8

Detective X was hard at work on his latest project. A certain Mr. J had come to him with a problem. ¶ "Someone has stolen my splendid puppet," cried the strange little man. He began to pace the small area of the detective's office. ¶ "Why is this puppet so important?" asked Detective X. ¶ Mr. J's face grew stern. "It's very special," he said. "You see, it talks." ¶ The man is a nut, thought Detective X. But it was his custom to take each job seriously. ¶ That night, Detective X began to stalk the streets in search of a lead. When he returned to his office, there was a note on the door. ¶ The note read: "You will find what you are looking for in the shallow river bed, beside the big bush at the edge of town." ¶ When Detective X arrived at the spot, he saw the puppet. Its design was strange, indeed! The fake hair and flesh looked real! He pushed a button on the puppet's head, and the head began to rotate. ¶ "Take me home to my friend," the puppet said. ¶ The strangest thing of all, was that the puppet looked just like Mr. J.

Card 07 (continued)

				Basal Target Words				Phonic Target Words			
Item#	Word	*Code*	*Col.#*	Item#	Word	*Code*	*Col.#*	Item#	Word	*Code*	*Col.#*
(blank column)		----	*47*					8-P1	splendid	____	*58*
8-B1	detective	____	*48*	8-B6	custom	____	*53*	8-P2	puppet	____	*59*
8-B2	project	____	*49*	8-B7	stalk	____	*54*	8-P3	job	____	*60*
8-B3	pace	____	*50*	8-B8	shallow	____	*55*	8-P4	fake	____	*61*
8-B4	area	____	*51*	8-B9	bush	____	*56*	8-P5	flesh	____	*62*
8-B5	stern	____	*52*	8-B10	design	____	*57*	8-P6	rotate	____	*63*

(go to p. 14)

	Code	*Col. #*
(Card number)	*1 2*	*1-2*
(blank column)	----	*3*
(ID #) _ _ _ _ - - - - -		*4-12*
(blank column)		*13*

PASSAGE SCORES

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Error Sub.	dog (drogs)	ES	____	*14-15*
Word Omis.	(of)	O	____	*16-17*
Mean. Sub.	dog (cat)	MS	____	*18-19*
Trans.	had (has)	T	____	*20-21*
Word Add.	^	WA	____	*22-23*
(blank column)			----	*24*
Passage Time	____ minutes		____	*25-26*
	____ seconds		____	*27-28*
(blank column)			----	*29*

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Invers.	(I am)	I	____	*30-31*
Repet.	dog	R	____	*32-33*
Hes/Sel.Cor.	dog (My)	HS	____	*34-35*
Redir.	⌐ ¬	RED	____	*36-37*
Punct.	⊙ ∧	P	____	*38-39*
Total # Passage Errors			____	*40-41*
(blank column)			----	*42*

(go to p. 14)

ORAL PASSAGES (SUBTEST III)
Passage #9

Chief Black glared at the young reporter as he gave him his new instructions.

"You had better avoid mistakes this time, Jim, or there's bound to be trouble. This paper is read all over the globe. Now, your job is to make contact with Hit Man at the bakery on First Street. Find out what his plans are. Remember, get the facts!"

As he left Chief Black's furnished office, Jim's eyes caught the embroidered sign that hung over the door. It said, ALL THE NEWS. Jim was scared. Hit Man was on the "Ten Most Wanted" list. But he had to get the story, or Chief Black would explode. Jim took great strides down the hall.

"I must resolve to keep my dignity, whatever happens," he told himself.

The bakery had been abandoned for years. A broken sign over the door said, DID YOU GET A FRESH LOAF OF BREAD TODAY? Suddenly, out of the darkness, Jim saw a hand with a gun extend towards him.

"Are you the reporter from the paper I called?" a voice asked. "Yeah," Jim whispered.

"Well, you're in luck. I'm turning myself in. I want the reward money to go to my wife and kids, that's the deal. But you get the story."

The front page the next day read, JUSTICE WINS. HIT MAN CAUGHT BY STAR REPORTER.

Card 07 (continued)

				Basal Target Words				Phonic Target Words			
Item#	Word	*Code*	*Col.#*	Item#	Word	*Code*	*Col.#*	Item#	Word	*Code*	*Col.#*
(blank column)		----	*64*								
9-B1	glared	____	*65*	9-B6	resolve	____	*70*	9-P1	avoid	____	*75*
9-B2	instructions	____	*66*	9-B7	dignity	____	*71*	9-P2	bound	____	*76*
9-B3	contact	____	*67*	9-B8	abandoned	____	*72*	9-P3	globe	____	*77*
9-B4	furnished	____	*68*	9-B9	extend	____	*73*	9-P4	embroidered	____	*78*
9-B5	strides	____	*69*	9-B10	justice	____	*74*	9-P5	explode	____	*79*
								9-P6	loaf	____	*80*

(go to p. 15)

Card # 12 (continued)

PASSAGE SCORES

Error Type	Marking Symbols		# Errors (Code)	Col. #s	Error Type	Marking Symbols		# Errors (Code)	Col. #s
Error Sub.	droog dog	ES	____	*43-44*	Invers.	I am	I	____	*59-60*
Word Omis.	dog	O	____	*45-46*	Repet.	dog	R	____	*61-62*
Mean. Sub.	dog cat	MS	____	*47-48*	Hes/Sel.Cor.	dog MS	HS	____	*63-64*
Trans.	had has	T	____	*49-50*	Redir.	⊏ ⊐	RED	____	*65-66*
Word Add.	^	WA	____	*51-52*	Punct.	⊙ ^	P	____	*67-68*
(blank column)		----		*53*	Total # Passage Errors			____	*69-70*
Passage Time	minutes		____	*54-55*	*(blank columns)*			----	*71-80*
	seconds		____	*56-57*					
(blank column)		----		*58*					

(go to p. 15)

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ORAL PASSAGES (SUBTEST III)
Passage #10

¶ Frequent combat was the rule for the one hundred men of Company C in the army, but stiffened bodies or not, they could not lag behind in the job. ¶ One morning the men awoke to the tone of the emergency siren. The enemy was attacking. Company C wanted to terrify the enemy into retreating. Confident of their plan, they quickly made a sign that advertized delicious food at the mess hall. The enemy saw the sign and walked into the mess hall. They purchased their food and ate. ¶ After a while, the leader said, "I reckon we're ready to take over this camp." ¶ Outside, the men of Company C were lying all over the vast area around the camp, as though they were dead. Some men propped themselves behind ridges to watch the fun to come. ¶ The enemy was terrified when they saw that the whole camp was dead.

¶ "The quality of the food here must be horrible," yelled the leader, and they ran away like babies crying, "I'm dying! Help! I've been poisoned!" ¶ Company C was howling with laughter.

	Code	Col.#
(Card number)	0 8	1-2
(blank column)	----	3
(ID#)_ _ _ _ _ _ _ _ _		4-12

Basal Target Words

Item#	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)		----	13				
10-B1	frequent	____	14	10-B6	purchased	____	19
10-B2	emergency	____	15	10-B7	reckon	____	20
10-B3	terrify	____	16	10-B8	vast	____	21
10-B4	confident	____	17	10-B9	ridges	____	22
10-B5	advertized	____	18	10-B10	quality	____	23

Phonic Target Words

Item#	Word	Code	Col.#
10-P1	combat	____	24
10-P2	stiffened	____	25
10-P3	lag	____	26
10-P4	awoke	____	27
10-P5	tone	____	28
10-P6	propped	____	29

(go to p. 16)

	Code	Col. #
(Card number)	1 3	1-2
(blank column)	----	3
(ID #) _ _ _ _ _ _ _ _ _		4-12
(blank column)		13

PASSAGE SCORES

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Error Sub.	dogs dog	ES	____	14-15
Word Omis.	(dog)	O	____	16-17
Mean. Sub.	dog cat	MS	____	18-19
Trans.	had has	T	____	20-21
Word Add.	^	WA	____	22-23
(blank column)			----	24
Passage Time	minutes		____	25-26
	seconds		____	27-28
(blank column)			----	29

Error Type	Marking Symbols		# Errors (Code)	Col. #s
Invers.	(I am)	I	____	30-31
Repet.	dog	R	____	32-33
Hes/Sel.Cor.	dog MS	HS	____	34-35
Redir.	⌐ ¬	RED	____	36-37
Punct.	⊙ ∧	P	____	38-39
Total # Passage Errors			____	40-41
(blank column)			----	42

(go to p. 16)

ORAL PASSAGES (SUBTEST III)
Passage #11

¶ Sam was a very poor man. He was a good man, but he was desperate because he had a family to feed. Every day, when Sam would trudge from one place of business to another, he would grow solemn. There was never any work. ¶ One night, Sam broke into a store. He tore his trousers on the broken window, and awkwardly banged his head in the dark. All he found in the cash box was twenty dollars. Sam did not need anyone to preach to him that crime did not pay. He had no doubt that one day he would be caught, no matter how cautious he might be. ¶ Later that night, Sam watched as news of the robbery flashed across the T.V. screen. He listened in distress, as the announcer gave a perfect description of the robber--right down to the torn pants and swollen forehead. Someone must have seen him leave the store! ¶ "If only I could leave the continent, or go out west to the prairie," Sam thought. But it was too late. The police were already at the door. ¶ When the people in Sam's neighborhood heard that Sam had been arrested, they went to the jail to demonstrate their support for him. They raised the bail money to get Sam free. They knew that Sam was a good man.

Card 08 (continued)

Basal Target Words								Phonic Target Words			
Item#	Word	Code	Col.#	Item#	Word	Code	Col.#	Item#	Word	Code	Col.#
(blank column)---			*30*					11-P1	trousers	____	*41*
11-B1	desperate	____	*31*	11-B6	cautious	____	*36*	11-P2	preach	____	*42*
11-B2	trudge	____	*32*	11-B7	distress	____	*37*	11-P3	crime	____	*43*
11-B3	solemn	____	*33*	11-B8	swollen	____	*38*	11-P4	announcer	____	*44*
11-B4	awkwardly	____	*34*	11-B9	continent	____	*39*	11-P5	demonstrate	____	*45*
11-B5	doubt	____	*35*	11-B10	prairie	____	*40*	11-P6	bail	____	*46*
								(blank column)---			*47*

(Go back to page 6 for more Card 08)

Card #13 (continued)

PASSAGE SCORES

Error Type	Marking Symbols		# Errors (Code)	Col. #s	Error Type	Marking Symbols		# Errors (Code)	Col. #s
Error Sub.	~~dog~~ drog	ES	____	*43-44*	Invers.	(I am)	I	____	*59-60*
Word Omis.	(dog)	O	____	*45-46*	Repet.	dog	R	____	*61-62*
Mean. Sub.	~~dog~~ cat	MS	____	*47-48*	Hes/Sel.Cor.	~~dog~~ pig	HS	____	*63-64*
Trans.	~~had~~ has	T	____	*49-50*	Redir.	⊏ ⊐	RED	____	*65-66*
Word Add.	^	WA	____	*51-52*	Punct.	⊙ ^	P	____	*67-68*
	(blank column)		----	*53*	Total # Passage Errors			____	*69-70*
Passage Time	____	minutes	____	*54-55*		*(blank columns)*		----	*71-80*
	____	seconds	____	*56-57*					*END END*
	(blank column)		----	*58*					

ORAL PASSAGES (SUBTEST III)
Comprehension Supplement

Passage #2

#	Question	Child's Response
1.	Who ran down the path?	
2.	Where was the little dog?	
3.	Why didn't Mary see little dog?	
4.	What did Mary do with the box?	
5.	What did Mary do with little dog?	

Passage #3

#	Question	Child's Response
1.	Who came to visit?	
2.	What did Sue want to do?	
3.	What will mother make?	
4.	What will they do after they eat?	
5.	What will they make things with?	

Passage #4

#	Question	Child's Response
1.	At the beginning of the story, who was home?	
2.	What did they need from town?	
3.	On the way to town, what did they hear?	
4.	Who was brave?	
5.	At the end of the story, what did they all do?	

Passage #5

#	Question	Child's Response
1.	Why did Farmer Gray call Farmer John?	
2.	Why did Farmer Gray want to get rid of the rooster?	
3.	Where did Farmer Gray put the rooster?	
4.	What was the rooster eating?	
5.	What did Farmer John say he would do?	

Passage #6

#	Question	Child's Response
1.	Where did Susan live?	
2.	What did Susan's father do to earn money?	
3.	Why was there a problem?	
4.	What did Susan do to help ?	
5.	What was her father doing when she went to look for him?	

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ORAL PASSAGES (SUBTEST III)
Comprehension Supplement

Passage #7

#	Question	Child's Response
1.	Where did Harold live?	
2.	What did Harold catch?	
3.	What did the creature eat?	
4.	What did Harold tell the boys to do if they wanted to see his creature?	
5.	What did the creature do when it saw Harold and the boys watching it?	

Passage #8

#	Question	Child's Response
1.	Who came to see Detective X?	
2.	What was Mr. J's problem?	
3.	What was special about the puppet?	
4.	How did the detective know where to look for the puppet?	
5.	Who did the puppet look like?	

Passage #9

#	Question	Child's Response
1.	Who did Chief Black give instructions to?	
2.	What were the instructions?	
3.	What did Hit Man plan to do?	
4.	Who would get the reward money?	
5.	What was Jim going to get?	

Passage #10

#	Question	Child's Response
1.	What woke the men of Company C up?	
2.	What was happening when they woke up?	
3.	What did the sign the men made advertize?	
4.	What were the men of Company C doing while the enemy was eating?	
5.	What did the enemy think when they saw the men lying around the camp?	

Passage #11

#	Question	Child's Response
1.	Why was Sam desperate?	
2.	What did Sam do because he was desperate and couldn't find work?	
3.	What did Sam find at the store?	
4.	What did Sam find out from the TV news?	
5.	What did Sam's neighbors do?	